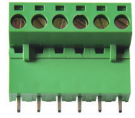


# EMDAŞ ELEKTRONİK

KLEMENS



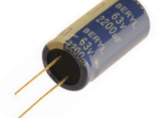
RÖLE



DISPLAY



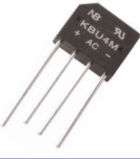
KONDANSATÖR



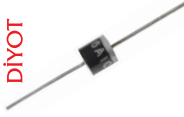
ENTEĞRE



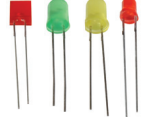
KÖPRÜ DİYOT



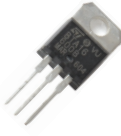
DİYOT



LED



TRANSİSTÖR



DİRENÇ



MALZEMELER



SMD



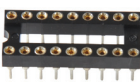
TRİMPOT



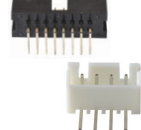
POTANSİYOMETRE



SOKET



KONNEKTÖR



MİC-PIEZO



SİGORTA



HOPARLÖR



JAK





**EMDAŞ ELEKTRONİK**



# EMDAŞ ELEKTRONİK

Firmamız 1991 yılında elektronik malzeme ithalatı ve toptan satışı amacıyla kurulmuştur. Ülkemizdeki en iyi elektronik malzeme tedarikçilerinden birisi olan firmamız müşterilerinin ihtiyaçlarında, kaliteyi ön planda tutar ve süresinde teslim eder. Oldukça geniş stok yelpazesi olan Emdaş Elektronik, stoklarındaki malzemelerin yurt dışı teminini en kısa sürede yapar ve taahhüdünü tam zamanında yerine getirir. Müşteri ihtiyaç listeleri tamamlanırken stokta olmayan malzemelerin yurt içi temini konusunda kar kaygısı gütmeksizin müşterilerine yardımcı olmayı bir görev addeder.

Bizimle çalışmakta olan ve bizi tercih edecek olan müşterilerimizin memnuniyeti bize şevk vermektedir.

## MİSYONUMUZ

Müşteri memnuniyetine dönük yönetim yapılanmamız ile size uygun tedarikçi olabilmek.  
Kalitesi kanıtlanmış olan ürünleri, siz değerli sektör kullanıcılarına kazandırmak.  
Kaliteden ödün vermeksizin, uygun maliyetli, doğru ve hızlı hizmet sunmak.  
Elektronik komponent sektöründe ülkemizde ve bölgemizde lider bir firma olmak.  
Dünya komponent teknolojisindeki gelişmeleri ve değişimleri takip ederek, anında sizlere kazandırmak.  
Her çeşit elektronik komponent talebini karşılayabilmek amacıyla sürekli portföyümüzü ve stoğumuzu zenginleştirmek.  
Malzeme temin ettiğimiz ülke ve şehirlerde ofisler ve uzman elemanlar bulundurmak

İnsanların mutluluğu,  
Gelecek nesillere saygı,  
Etik ilkelerle yönetim,  
Değişim,  
Başarma tutkusu,  
Bize değer katar...

## VİZYONUMUZ

Verdiğimiz tüm hizmetlerde Türkiye'de en iyisi olmaya devam ederek globalleşen dünyada örnek şirket olmak.

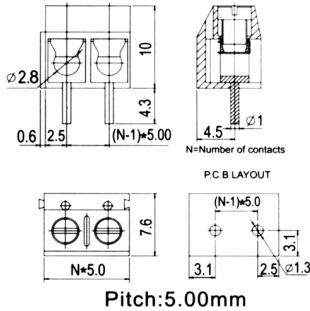
## İLKELERİMİZ

Bağımsızlık ve Tarafsızlık  
Dürüstlük ve Güvenilirlik  
Sürekli Gelişim  
Bilgi Üretimi ve Paylaşımı  
Müşteri Odaklı ve Nitelikli Hizmet  
Çalışanlarına Değer Verme



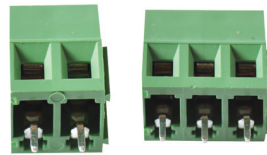


**KF301V**

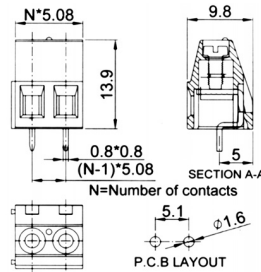


Pitch:5.00mm

- **Material**  
Screw :M2.5 steel Zinc plated  
Wire guard:phosphor bronze Ni plated or stainless steel  
Pin header:Brass,Tin plated  
Housing :PBT,UL94V-0
- **Electrical**  
Rated voltage :300V  
Rated current :12A  
Contact resistance :20m $\Omega$   
Insulation resistance :5000M $\Omega$ /1000V  
Withstanding Voltage:AC1500V/1Min  
Wire range :22-14AWG 2.5mm<sup>2</sup>
- **Mechanical**  
Temp.Range :-30 $^{\circ}$ C~+120 $^{\circ}$ C  
MAX Soldering:+250 $^{\circ}$ C for 5 Sec.  
Torque :0.4Nm (3.6lb.in)  
Strip length :4.5-5mm

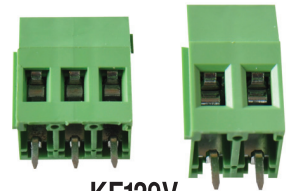


**KF128V-5.0 - KF128V-5.08**

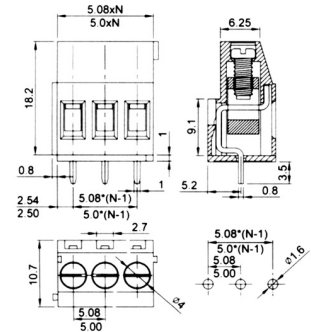


Pitch:5.00mm 5.08mm

- **Material**  
Screw :M2.5 steel Zinc plated  
Contact :Brass Ni plated  
Pin header:Brass,Tin plated  
Housing :PA66,UL94V-0
- **Electrical**  
Rated voltage :300V  
Rated current :10A  
Contact resistance :20m $\Omega$   
Insulation resistance :5000M $\Omega$ /1000V  
Withstanding Voltage:AC1500V/1Min  
Wire range :24-12AWG 2.5mm<sup>2</sup>
- **Mechanical**  
Temp.Range :-40 $^{\circ}$ C~+105 $^{\circ}$ C  
MAX Soldering:+250 $^{\circ}$ C for 5 Sec.  
Torque :0.4Nm (3.6lb.in)  
Strip length :6-7mm



**KF129V**

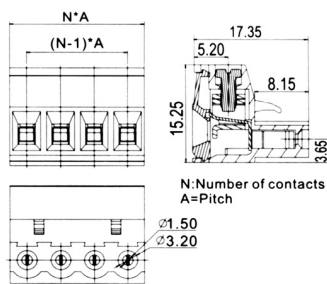


Pitch:5.00,5.08,7.50,7.62mm

- **Material**  
Screw :M3 steel Zinc plated  
Contact :Brass Ni plated  
Pin header:Brass,Tin plated  
Housing :PA66,UL94V-0
- **Electrical**  
Rated voltage :300V  
Rated current :20A  
Contact resistance :20m $\Omega$   
Insulation resistance :5000M $\Omega$ /1000V  
Withstanding Voltage:AC1500V/1Min  
Wire range :24-12AWG 0.5-2.5mm<sup>2</sup>
- **Mechanical**  
Temp.Range :-40 $^{\circ}$ C~+105 $^{\circ}$ C  
MAX Soldering:+250 $^{\circ}$ C for 5 Sec.  
Torque :0.4Nm (3.6lb.in)  
Strip length :6-7mm

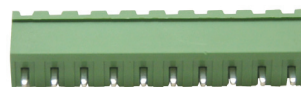


**KF2EDG**

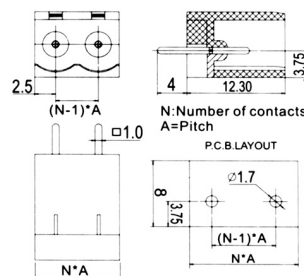


Pitch:5.00,5.08,7.50 7.62mm

- **Material**  
Screw :M2.5 steel Zinc plated  
Contact :Phosphor bronze  
Housing :PA66,UL94V-0
- **Electrical**  
Rated voltage :300V  
Rated current :15 A  
Contact resistance :20m $\Omega$   
Insulation resistance :5000M $\Omega$ /1000V  
Withstanding Voltage:AC1500V/1Min  
Wire range :28-12AWG 2.5mm<sup>2</sup>
- **Mechanical**  
Temp.Range :-40 $^{\circ}$ C~+105 $^{\circ}$ C  
MAX Soldering:+250 $^{\circ}$ C for 5 Sec.  
Torque :0.5Nm (4.5lb.in)  
Strip length :7-8mm



**KF2EDGV**

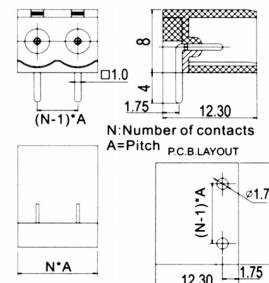


Pitch.5.00,5.08 7.50 7.62mm

- **Material**  
Pin header:Brass,Tin plated  
Housing :PA66,UL94V-0
- **Electrical**  
Rated voltage :300V  
Rated current :15 A  
Contact resistance :20m $\Omega$   
Insulation resistance :5000M $\Omega$ /1000V  
Withstanding Voltage:AC1500V/1Min
- **Mechanical**  
Temp.Range :-40 $^{\circ}$ C~+105 $^{\circ}$ C  
MAX Soldering:+250 $^{\circ}$ C for 5 Sec.



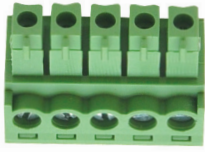
**KF2EDGR**



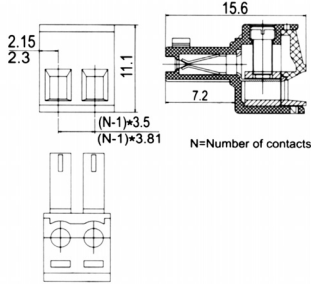
Pitch:5.00,5.08,7.50,7.62mm

- **Material**  
Pin header:Brass,Tin plated  
Housing :PA66,UL94V-0
- **Electrical**  
Rated voltage :300V  
Rated current :15 A  
Contact resistance :20m $\Omega$   
Insulation resistance :5000M $\Omega$ /1000V  
Withstanding Voltage:AC1500V/1Min
- **Mechanical**  
Temp.Range :-40 $^{\circ}$ C~+105 $^{\circ}$ C  
MAX Soldering:+250 $^{\circ}$ C for 5 Sec.





**KF2EDG-3.5 - KF2EDG-3.81**



Pitch:3.50mm,3.81mm

► **Material**

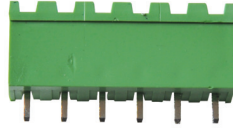
Screw :M2.0 steel Zinc plated  
Contact :Phosphor bronze  
Housing :PA66,UL94V-0

► **Electrical**

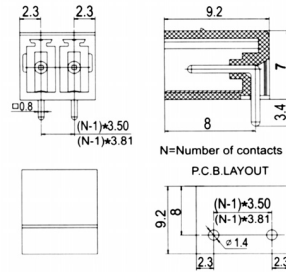
Rated voltage :300V  
Rated current :8A  
Contact resistance :20m Ω  
Insulation resistance :5000M Ω /1000V  
Withstanding Voltage:AC1500V/1Min  
Wire range :28-16 AWG 0.5-1.5mm<sup>2</sup>

► **Mechanical**

Temp.Range :-40 °C~+105 °C  
MAX Soldering:+250 °C for 5 Sec.  
Strip length :5-6mm



**KF2EDG-3.5V - KF2EDG-3.81V**



Pitch:3.50mm,3.81mm

► **Material**

Pin header:Brass,Tin plated  
Housing :PA66,UL94V-0

► **Electrical**

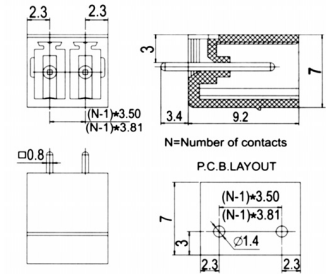
Rated voltage :300V  
Rated current :8A  
Contact resistance :20m Ω  
Insulation resistance :5000M Ω /1000V  
Withstanding Voltage:AC1500V/1Min

► **Mechanical**

Temp.Range :-40 °C~+105 °C  
MAX Soldering:+250 °C for 5 Sec.



**KF2EDG-3.5R - KF2EDG-3.81R**



Pitch:3.50mm,3.81mm

► **Material**

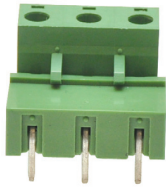
Pin header:Brass,Tin plated  
Housing :PA66,UL94V-0

► **Electrical**

Rated voltage :300V  
Rated current :8A  
Contact resistance :20m Ω  
Insulation resistance :5000M Ω /1000V  
Withstanding Voltage:AC1500V/1Min

► **Mechanical**

Temp.Range :-40 °C~+105 °C  
MAX Soldering:+250 °C for 5 Sec.



**KF2EDG-7.62**

► **Material**

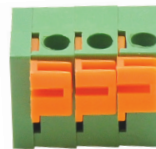
Screw :M2.5 steel Zinc plated  
Contact :Phosphor bronze  
Housing :PA66,UL94V-0

► **Electrical**

Rated voltage :300V  
Rated current :15A  
Contact resistance :20m Ω  
Insulation resistance :5000M Ω /1000V  
Withstanding Voltage:AC1500V/1Min  
Wire range :28-12AWG 2.5mm<sup>2</sup>

► **Mechanical**

Temp.Range :-40 °C~+105 °C  
MAX Soldering:+250 °C for 5 Sec.  
Torque :0.5Nm (4.5lb.in)  
Strip length :7-8mm



**KF141V/R - KF142V/R**

**Material**

Pin Header : Brass, Tin plated  
Housing : PA66, UL94V-0

**Electrical**

Rated Voltage : 150V 300V  
Rated current : 2A 10A  
Contact resistance : 20MΩ  
Insulation resistance : 5000MΩ 1000V  
Withstandin Voltage : AC1500V 1MIN  
Wire range : 24-20AW6 1mm<sup>2</sup>  
: 24-16AW6 1mm<sup>2</sup>  
: 24-14AW6 1mm<sup>2</sup>

**Mechanical**

Temp Range : -40C ~ +105 C  
Max Soldering : +250C for 55EC  
Strip Length : 9 - 10 - 11 mm



**BARIYER KLEMENS**

**Material**

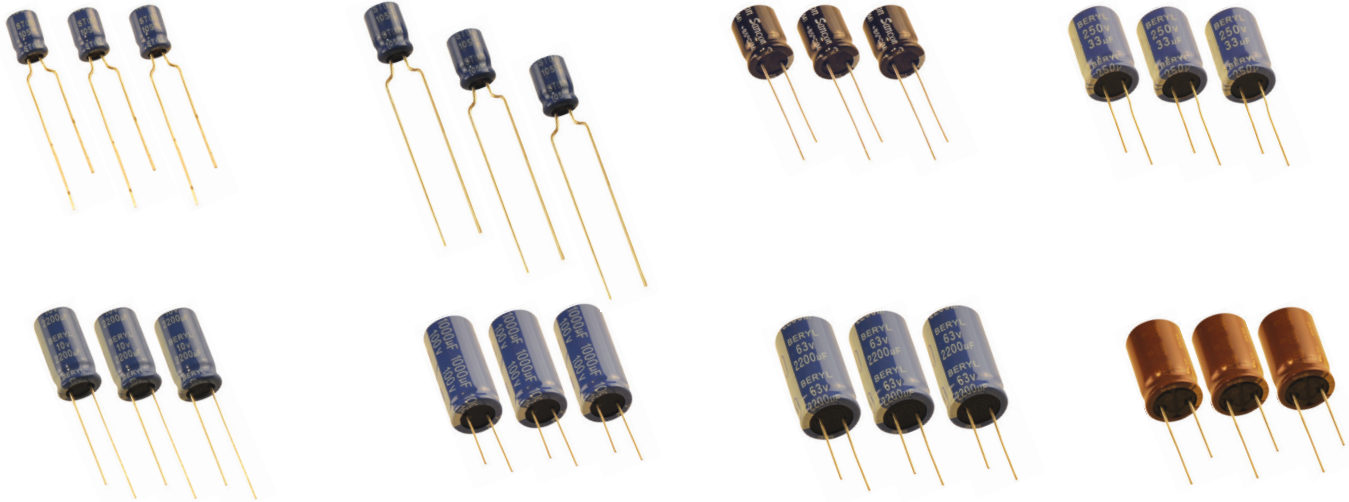
Pin Header : Brass, Tin plated  
Housing : PA66, UL94V-0

**Electrical**

Rated Voltag : 150V 300V  
Rated current : 2A 10A  
Contact resistance : 20MΩ  
Insulation resistance : 5000MΩ 1000V  
Withstandin Voltage : AC1500V 1MIN  
Wire range : 24-20AW6 1mm<sup>2</sup>  
: 24-16AW6 1mm<sup>2</sup>  
: 24-14AW6 1mm<sup>2</sup>

**Mechanical**

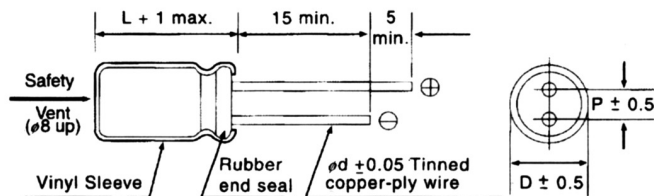
Temp Range : -40C ~ +105 C  
Max Soldering : +250C for 55EC  
Strip Length : 9 - 10 - 11 mm



## ■ SPECIFICATIONS

Items	Characteristics		
Category	-40 ~ +105 °C (6.3 ~ 400V)		
Temperature Range	-25 ~ +105 °C (450V)		
Rated Voltage Range	6.3 ~ 450V		
Capacitance Tolerance	± 20% (at 20 °C 120Hz)		
Leakage Current	6.3 ~ 100V	160 ~ 450V	
	I=0.03CV or 4µA, Whichever is greater. (at 20 °C after 1 minute)	Time	After 5minutes
		CV ≤ 1000	I=0.1CV+40
		CV>1000	I=0.04CV+100
Where, I:Max.leakage current(µA), C:Nominal capacitance(µF), V:Rated voltage(V)		(at 20 °C)	
Dissipation Factor (tanδ)	Rated voltage(V)	6.3 10 16 25 35 50 63 100 160 ~ 250 350 ~ 400 450	
	tanδ(Max)	0.34 0.24 0.20 0.16 0.14 0.12 0.10 0.08 0.20 0.24 0.24	
When nominal capacitance exceeds 1000µF, add 0.02 to the value above for each 1000µF increase. (at 20 °C 120Hz)			
LOW Temperature Characteristics (Max.Impedance Ratio)	Rated voltage(V)	6.3 10 16 25 35 50 63 100 160 ~ 250 350 ~ 400 450	
	Z(-25°C)/Z(+20°C)	5 4 3 2 2 2 2 2 3 6 6	
Z(-40°C)/Z(+20°C) 12 10 8 5 4 3 3 3 4 6 (at 120Hz)			
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20 °C after subjected to DC voltage with the rated ripple current is applied for 1000hours(2000 hours to meet the following two conditions ≥ 160V and ≥ 13Φ at 105 °C)		
	Capacitance change	≤ ±20% of the initial value	
	D.F.(tanδ)	≤ 200% of the initial specified value	
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20 °C after exposing them for 1000 hours at 105 °C without voltage applied.		
	Rated voltage	6.3 ~ 100V 160 ~ 450V	
	capacitance change	≤ ±20% of the initial value	
	D.F.(tanδ)	≤ 200% of the initial specified value	

## ■ DIMENSIONS(mm)



ΦD	5	6.3	8	10	12.5	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
Φd	0.5	0.5	0.5	0.6	0.6	0.8	0.8

α	(L<20)1.0
	(L≥20)2.0

## POLYESTER KONDANSATÖRLER



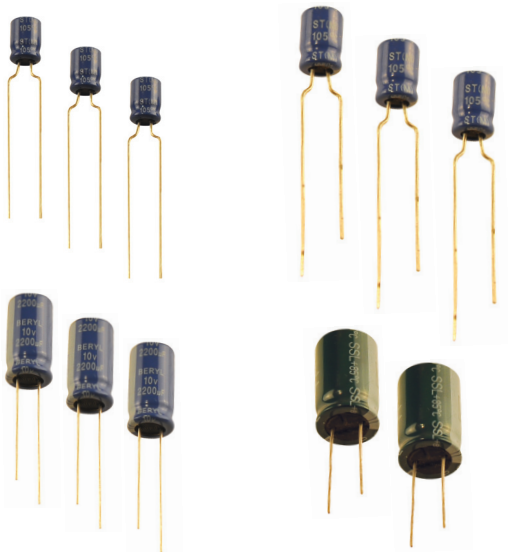
## SERAMİK KONDANSATÖRLER



## MULTILAYER KONDANSATÖRLER



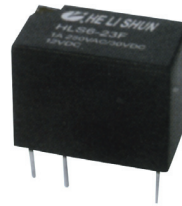
## MİNİ KONDANSATÖRLER



## SMD KONDANSATÖRLER







### HLS6 - 23F



### HLS - (4078)



### HLS8 - T73

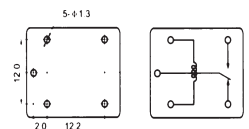
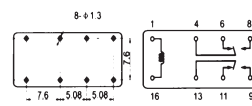
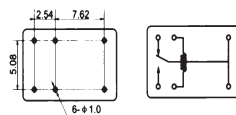
Dimension
Contact Data
Contact Form
Contact Material
Contact Ratings
Max Switching Voltage
Max Switching Current
Max Switching Power
Initial Contact Resistance
Life Expectancy
Coil Data
Rated Voltage
Coil Power
General Data
Insulation Resistance at 500VDC
Dielectric Strength Between Open Contacts
50-60Hz(1 minute) Between Contacts & Coil
Operate Time
Release Time
Ambient Temperature
Weight
Terminal Type

12.5x7.5x10
1C
Au+Ag
1A:125VAC/30VDC
125VAC/30VDC
1A
125VA/30W
50mΩ Max
100,000 (Rated Load)
10,000,000 (No Load)
3-24VDC
0.15W, 0.2W
100MΩ Min
500VAC
1000VAC
5ms Max
5ms Max
-30°C to +70°C
Approx 1.8g
PCB

21x9.9x12.2
2C
Au+Ag
1A 120VAC/24VDC
240VAC/60VDC
2A
120VA/30W
50mΩ Max
100,000 (Rated Load)
10,000,000 (No Load)
3-48VDC
0.2W, 0.36W, 0.45W
100MΩ Min
500VAC
1000VAC
6ms Max
4ms Max
-30°C to +70°C
Approx 5g
PCB

19x15.5x15.8
1A / 1B / 1C
Ag Alloy
1A: 10A240VAC/12A120VAC/24VDC
1B: 8A240VAC
1C: 10A120VAC/24VDC 7A240VAC
250VAC/30VDC
15A
2770VA/90W
50mΩ Max
100,000 (Rated Load)
10,000,000 (No Load)
3-48VDC
0.36W, 0.45W
100MΩ Min
750VAC
1500VAC
10ms Max
5ms Max
-40°C to +85°C
Approx 10g
PCB

PC Board Layout  
& Wiring Diagram  
(Bottom View)

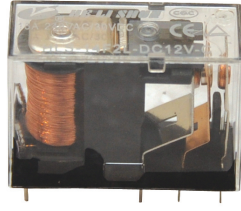




### HLS - T78



### HLS - 14F1



### HLS - 14F2

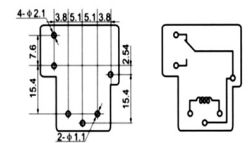
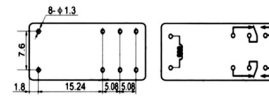
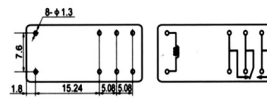
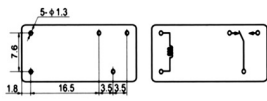
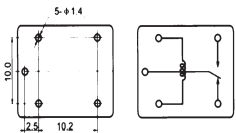


### HLS - 14F3



### HLS - T90 (15F)

15.7x12.3x14	29x12.6x20.6	29x12.6x20.6	29x12.6x20.6	32.5x27.5x20.4
1A / 1B / 1C	1A / 1C	1A / 1C	2A / 2C	1A / 1B / 1C
Ag Alloy	Ag Alloy	Ag Alloy	Ag Alloy	Ag Alloy
NO: 20A 14VDC/10A 120VAC NC: 12A 14VDC/10A 120VAC 1C: 7A 120VAC	10A 240VAC/10A 30VDC	16A 240VAC/16A 30VDC	5A 240VAC/5A 30VDC	1A:30A240VAC/20A28VDC 1B:15A240VAC/10A28VDC 1C:20A/10A240VAC/28VDC
120VAC/16VDC	250VAC/110VDC	250VAC/110VDC	250VAC/110VDC	250VAC/30VDC
25A	10A	16A	5A	30A
840VA/400W	2500VA/300W	4000VA/480W	1250VA/150W	6000VA/560W
100mΩ Max	100mΩ Max	50mΩ Max	100mΩ Max	100mΩ Max
100,000 (Rated Load)	100,000 (Rated Load)	100,000 (Rated Load)	100,000 (Rated Load)	100,000 (Rated Load)
10,000,000 (No Load)	10,000,000 (No Load)	10,000,000 (No Load)	10,000,000 (No Load)	10,000,000 (No Load)
6-24VDC	3-48VDC	3-48VDC	3-48VDC	3-48VDC
0.6W, 0.8W	0.53W, 0.72W	0.53W, 0.72W	0.53W, 0.72W	0.93W
100MΩ Min	100MΩ	100MΩ	100MΩ	100MΩ Min
500VAC	1000VAC	1000VAC	1000VAC	1500VAC
500VAC	5000VAC	5000VAC	5000VAC	2000VAC
10ms Max	15ms Max	15ms Max	15ms Max	15ms Max
5ms Max	8ms Max	8ms Max	8ms Max	10ms Max
-40°C to +85°C	-30°C to +70°C	-30°C to +70°C	-30°C to +70°C	-40°C to +85°C
Approx 6g	Approx 13g	Approx 13g	Approx 13g	Approx 32g
PCB	PCB	PCB	PCB	PCB





## 3mm LED

Chip			Lens Color	V <sub>F</sub> (V) at I <sub>F</sub> =20mA		I <sub>V</sub> (mcd)			Viewing Angle 2 θ 1/2
Material	Emitted Color	λ D(nm)		Typ.	Max.	at I <sub>F</sub> =mA	Min.	Typ.	
GaP	Green	570	Color Diff.	2.1	2.4	10	4.0	8.0	70
GaAsP/GaP	Yellow	590		2.0	2.4		4.0	8.0	
GaAsP/GaP	Hi-Eff Red	660		1.7	2.4		4.0	50	
GaAsP/GaP	Orange	625		2.0	2.4		4.0	9.0	
GaP	Red	700		2.0	2.4		2.5	6.0	
GaP	Green	570	Color Trans.	2.1	2.4	10	25	45	30
GaAsP/GaP	Yellow	590		2.0	2.4		25	45	
GaAsP/GaP	Hi-Eff Red	660		1.7	2.4		63	125	
GaAsP/GaP	Orange	625		2.0	2.4		25	45	
GaP	Red	700		2.0	2.4		4.0	12	

## 3mm LED

Chip			Lens Color	V <sub>F</sub> (V) at I <sub>F</sub> =20mA		I <sub>V</sub> (mcd)			Viewing Angle 2 θ 1/2	
Material	Emitted Color	λ D(nm)		Typ.	Max.	at I <sub>F</sub> =mA	Min.	Typ.		
GaN / SiC	Blue	430	Water Clear	3.8	4.5	20	250	400	25	
InGaN	Super Blue	470		3.5	4.3		800	1600		
InGaN	Super Blue Green	505		3.7	4.3		1000	1800		
InGaN	Super Green	525		3.7	4.3		1200	2000		
GaP	Green	571		2.1	2.4		100	150		
AlGainP	Super Yellow	589		2.1	2.4		200	500		
AlGainP	Super Yellow	589		2.0	2.4		1000	2500		
AlGainP	Super Sunset orange	615		2.0	2.4		250	625		
AlGainP	Super Sunset orange	615		2.0	2.4		1200	3000		
AlGainP	Hyper Red	624		2.0	2.4		230	570		
AlGainP	Hyper Red	624		2.0	2.4		1100	2750		
Gaw	White			3.6	4.0		1000	2300		30

## MANTAR LED

Chip			Lens Color	V <sub>F</sub> (V) at I <sub>F</sub> =20mA		I <sub>V</sub> (mcd)			Viewing Angle 2 θ 1/2
Material	Emitted Color	λ D(nm)		Typ.	Max.	at I <sub>F</sub> =mA	Min.	Typ.	
AlGaP	Red	624	Water Clear	800	400	20	2.0	2.4	90
AlGaP	Orange	605		800	400	17	2.0	2.4	
AlGaP	Yellow	589		800	400	15	2.0	2.4	
AlGaP	Yellow Green	571		400	200	15	2.0	2.4	
InGaN	Green	525		3000	2000	35	3.0	3.6	
InGaN	Blue	470		800	400	25	3.0	3.6	
InGaN	Purple	405		200	100	25	3.0	3.6	
InGaN	White	x:0,29 / y:0,28	Yellow Diffuse	5000	3000	**	3.0	3.6	
InGaN	Warm White	x:0,41 / y:0,40		5000	3000	**	3.0	3.6	





### 5mm LED



Part Number HT-xxx	Chip			Lens Color	V <sub>F(V)</sub> at I <sub>F</sub> =20mA		I <sub>V</sub> (mcd)			Viewing Angle 2 θ 1/2
	Material	Emitted Color	λ D(nm)		Typ.	Max.	at I <sub>F</sub> =mA	Min.	Typ.	
333GD	GaP	Green	570	Color Diff	2.1	2.4	10	2.0	10	45
333YD	GaAsP / GaP	Yellow	590		2.0	2.4		2.0	10	
333SRD	GaAsP / GaP	Hi-Eff Red	660		2.0	2.4		100	250	
333HD	GaAsP / GaP	Red	700		1.7	2.4		1.0	2.0	
333GT	GaP	Green	570	Color Trans.	2.1	2.4	10	10	30	20
333YT	GaP	Yellow	590		2.0	2.4		10	30	
333SRT	GaAsP / GaP	Hi-Eff Red	660		1.7	2.4		250	400	
333HT	GaP	Red	700		2.0	2.4		1.5	8.0	

### 5mm LED

Chip			Lens Color	V <sub>F(V)</sub> at I <sub>F</sub> =20mA		I <sub>V</sub> (mcd)			Viewing Angle 2 θ 1/2
Material	Emitted Color	λ D(nm)		Typ.	Max.	at I <sub>F</sub> =mA	Min.	Typ.	
GaN/SiC	Bule	430	Water Clear	3.8	4.5	20	250	400	10
InGaN	Super blue	470		3.5	4.3		1000	1330	
InGaN	Super Blue Green	505		3.7	4.3		1600	2500	15
InGaN	Super Green	525		3.7	4.3		2500	4000	10
GaP	Green	571		2.1	2.4		130	190	24
GaP	Super Green	571		2.1	2.4		400	630	15
ALGainP	Super Yellow	589		2.0	2.4		410	1080	10
ALGainP	Super Yellow	589		2.0	2.4		2030	3240	
ALGainP	Super Yellow	589		2.0	2.4		2860	3720	
ALGainP	Super Sunset Orange	615		2.0	2.4		430	1150	
ALGainP	Super Sunset Orange	615		2.0	2.4		2150	3590	10
ALGainP	Super Sunset Orange	615		2.0	2.4		3260	4240	
ALGainP	Hyper Red	624		2.0	2.4		340	890	20
ALGainP	Hyper Red	624		2.0	2.4		1610	2750	
ALGainP	Super Deep-Red	639		2.0	2.4		370	630	
ALGainP	Super Deep-Red	639		2.0	2.4		970	1320	
ALGainP	Super Deep-Red	639		2.0	2.4		1090	1480	20
GaN	White			3.6	4.0		2300	4500	

### POWER LED TEK ÇİPLİ



Chip			Lens Color	V <sub>F(V)</sub> at I <sub>F</sub> =20mA		I <sub>V</sub> (mcd)			Viewing Angle 2 θ 1/2
Material	Emitted Color	λ D(nm)		Typ.	Max.	at I <sub>F</sub> =2mA		at I <sub>F</sub> =2mA	
						Typ.	Min.	Typ.	
AlGaInP	Red	624	Water Clear	2.0	2.4	20	40	80	120
AlGaInP	Yellow	589		2.0	2.4	15	40	80	
InGaN	Green	525		3.3	3.8	35	50	80	
InGaN	Blue	470		3.3	3.8	25	30	50	
InGaN	White	x:0,29 / y:0,28		3.3	3.8		60	80	
InGaN	Warm White	x:0,2h / y:0,28		3.3	3.8		60	80	
InGaN	Purple	390		3.3	3.8	35	6	8	

### POWER LED ÜÇ ÇİPLİ

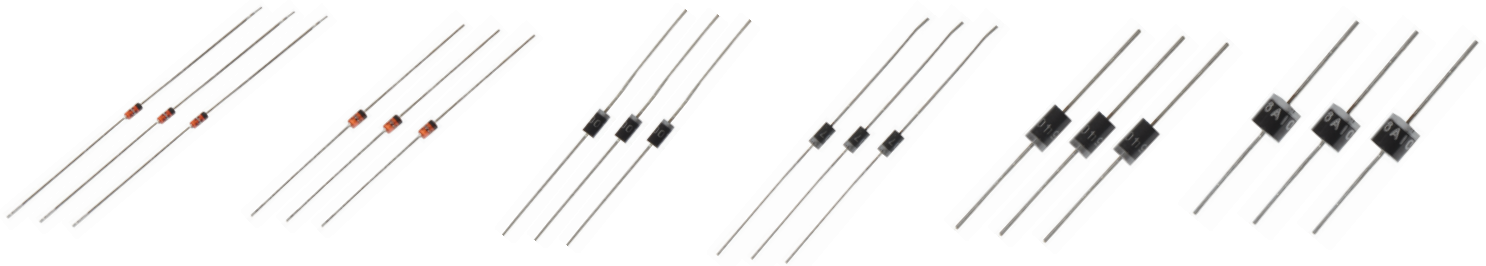
Chip			Lens Color	V <sub>F(V)</sub> at I <sub>F</sub> =20mA		I <sub>V</sub> (mcd)			Viewing Angle 2 θ 1/2
Material	Emitted Color	λ D(nm)		Typ.	Max.	at I <sub>F</sub> =2mA		at I <sub>F</sub> =2mA	
						Typ.	Min.	Typ.	
AlGaInP	Red	624	Water Clear	2.0	2.4	20	80	100	120
AlGaInP	Yellow	589		2.0	2.4	15	80	100	
InGaN	Green	525		3.3	3.8	35	80	100	
InGaN	Blue	470		3.3	3.8	25	70	90	
InGaN	White	x:0,29 / y:0,28		3.3	3.8		100	120	
InGaN	Warm White	x:0,2h / y:0,28		3.3	3.8		100	120	
InGaN	Purple	390		3.3	3.8	35	10	9	







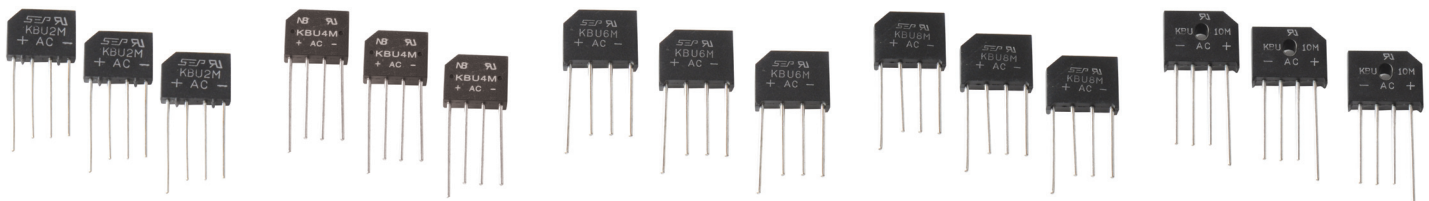
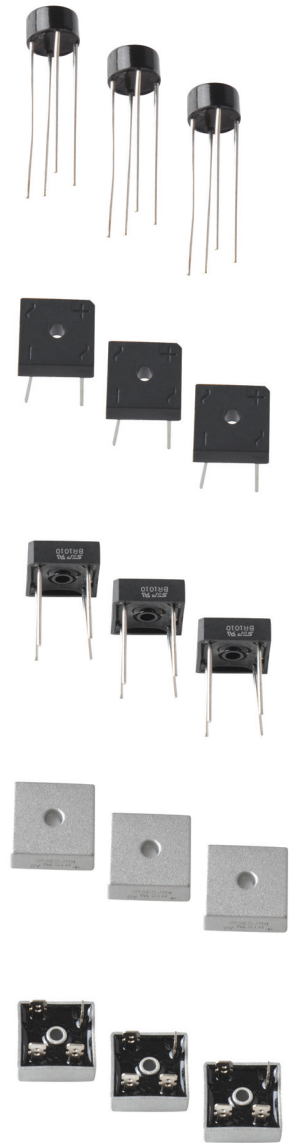


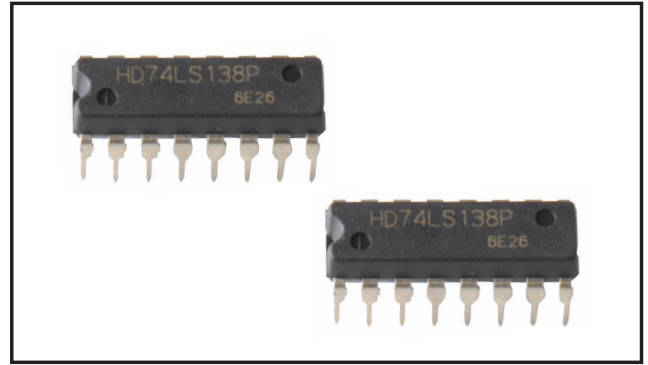
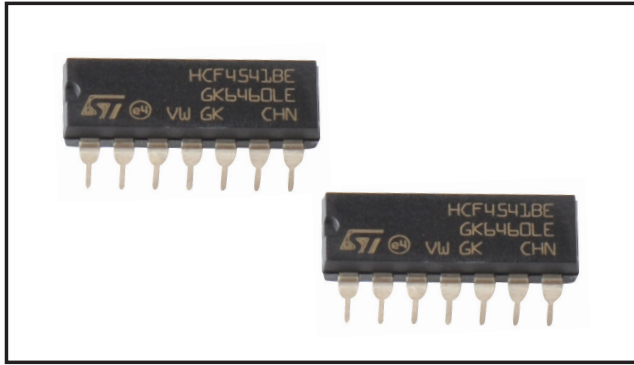
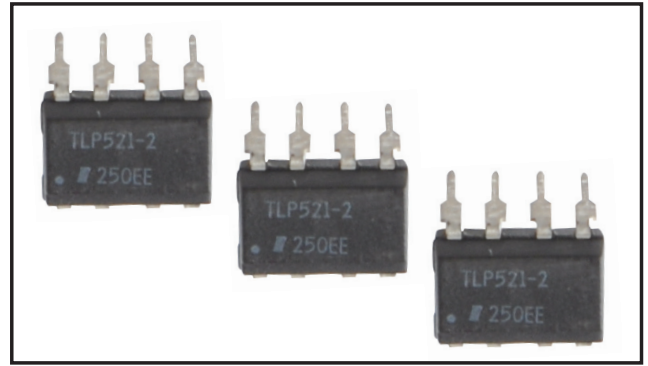
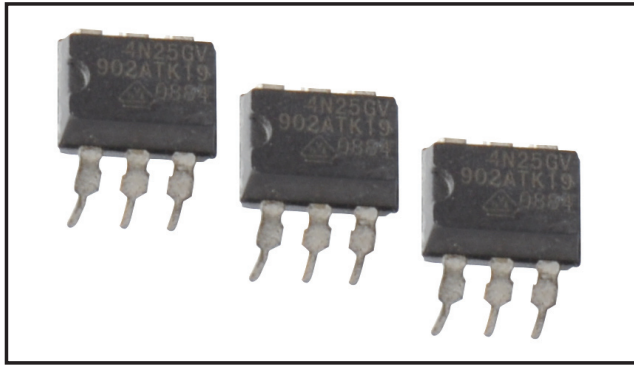


Part Number	Peak Repetitive Reverse Voltage	Max Average Rectified Current		Max. Peak Forward Surge Current	Max. Reverse Current		Forward Voltage Drop	
	VRRM	Io@TA		IFSM	IR@VR		VF@IF	
	V	A	°C	A	A	V	V	A
1N4007	1000	1A	75	30	5.0	1000	1.0	1.0
M7SMD	1000	1A	100	30	5.0	1000	1.1	1.0
1N5408	1000	3A	75	200	5.0	1000	1.1	3.0
6A10	1000	6A	75	400	5.0	1000	1.0	6.0
1N5819	40	1A	90	25	1.0	40	0.60	1.0
1N5822	40	3A	75	80	3.0	40	0.325	3.0
RB154	400	1.5A	40	50	10.0	400	1.1	1.5
W10M	1000	1.5A	40	50	10.0	1000	1.1	1.5
2W10M	1000	2A	25	60	10.0	1000	1.1	2.0
KBU4M	1000	4A	100	200	10.0	1000	1.1	4.0
KBU6M	1000	6A	100	250	10.0	1000	1.1	6.0
KBU8M	1000	8A	100	300	10.0	1000	1.1	8.0
KBU10M	1000	10A	100	300	10.0	1000	1.05	10.0
BR1010	1000	10A	50	150	10.0	1000	1.1	5.0
KBPC3510	1000	35A	55	400	10.0	1000	1.0	17.5
KBPC5010	1000	50A	55	400	10.0	1000	1.0	25
1N4148	75	10A	25	1.0	5.0	75	1.0	10
BA159	1000	1A	75	30	5.0	1000	1.3	1.0
BY298	400	2A	75	70	10.0	400	1.3	2.0
BY399	800	3A	75	200	10.0	800	1.3	3.0
UF4007	1000	1A	55	30	10.0	1000	1.70	1.0

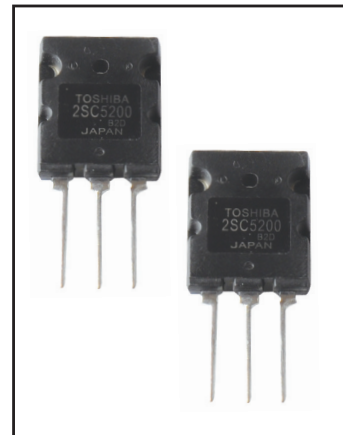
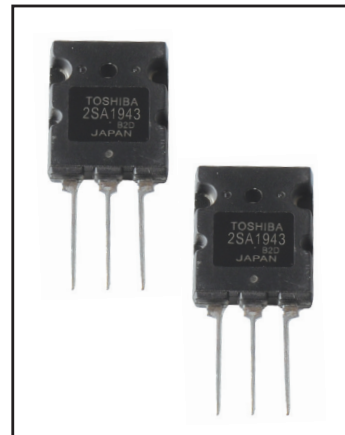
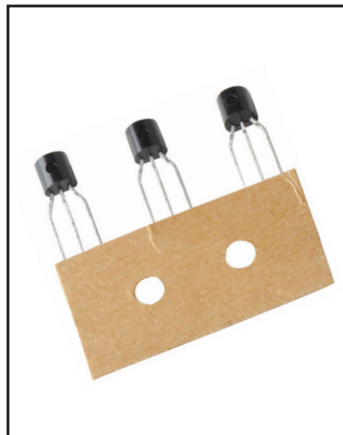
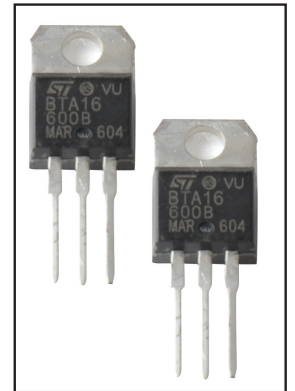
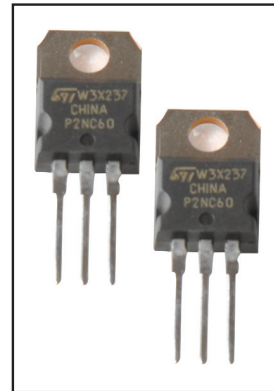
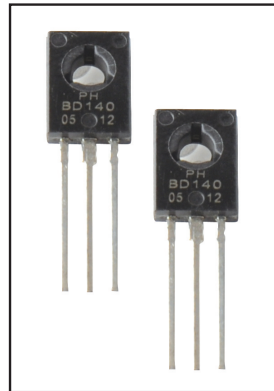
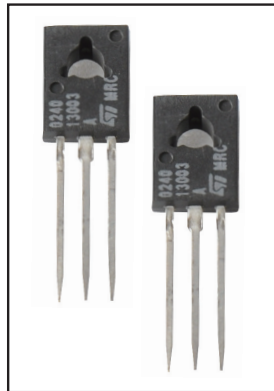
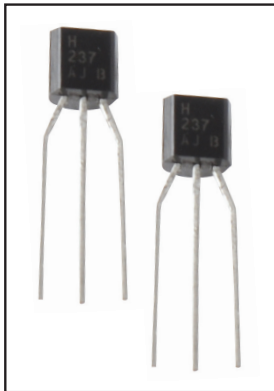
Part Number	Peak Pluse Current iTRM	Breakover Voltage VBO		Breakover Voltage Symmetry (V(BR)1) - (V(BR)2)	Dynamic Breakback Voltage	Breakover Current İBO
	A	V		V	V	V
	Max	Min	Max	Max	Min	Min
<b>Axial Leaded</b>						
DB3	2.0	28	36	±3	5.0	100

0,5 W ZENER DİOD 1N5221B - 1N5267B (2.4V - 75V)  
0,5 W ZENER DİOD 1N4278A - 1N4761A (3.3V - 75V)





# TRANSİSTÖRLER



1/8W KARBON FİLM DİRENÇ  
1/4W KARBON FİLM DİRENÇ  
1/2W KARBON FİLM DİRENÇ  
1W KARBON FİLM DİRENÇ  
2W KARBON FİLM DİRENÇ

1/8W METAL FİLM DİRENÇ  
1/4W METAL FİLM DİRENÇ  
1/2W METAL FİLM DİRENÇ  
1W METAL OKSİT DİRENÇ  
2W METAL OKSİT DİRENÇ

5W TAŞ DİRENÇ  
11W TAŞ DİRENÇ  
SMD DİRENÇ



STYLE	DIMENSION (mm)				POWER RATING (Watt)	VALUE RANGE
	L	∅D	H	∅d		
CR-12 1/8w	3.2 ± 0.2	1.8 ± 0.3	28 ± 2	0.43 ± 0.02	1/6W ; 1/8W	1Ω~10M
CR-25 1/4w	6.0 ± 0.2	2.3 ± 0.3	28 ± 2	0.5 ± 0.02	1/4W	1Ω~10M
CR-50 1/2w	9 ± 0.5	3.2 ± 0.3	26 ± 2	0.6 ± 0.02	1/2W	1Ω~10M
CR-100 1w	11.0 ± 0.5	4.5 ± 0.5	35 ± 2	0.7 ± 0.02	1W	1Ω~10M
CR-200 2w	15.0 ± 0.5	5.0 ± 0.5	32 ± 2	0.8 ± 0.02	2W	1Ω~10M
CR-300 3w	17.0 ± 0.5	6.0 ± 0.5	32 ± 2	0.8 ± 0.02	3W	1Ω~10M

STYLE	DIMENSIONS (mm)						∅d
	Normal		Mini.		Normal		
SQM-P-L	L		W		H		
11W	51 ± 1.5		13 ± 1.0		9,0 ± 1.0		0.8 ± 0.05
5W	22 ± 1.5		9.5 ± 1.0		9.0 ± 1.0		0.8 ± 0.05



### MONO POT (UZUN 20 mm VE KISAMİL 15 mm ) ÇEŞİTLERİ STEREO ve ANAHTARLI POT ÇEŞİTLERİ



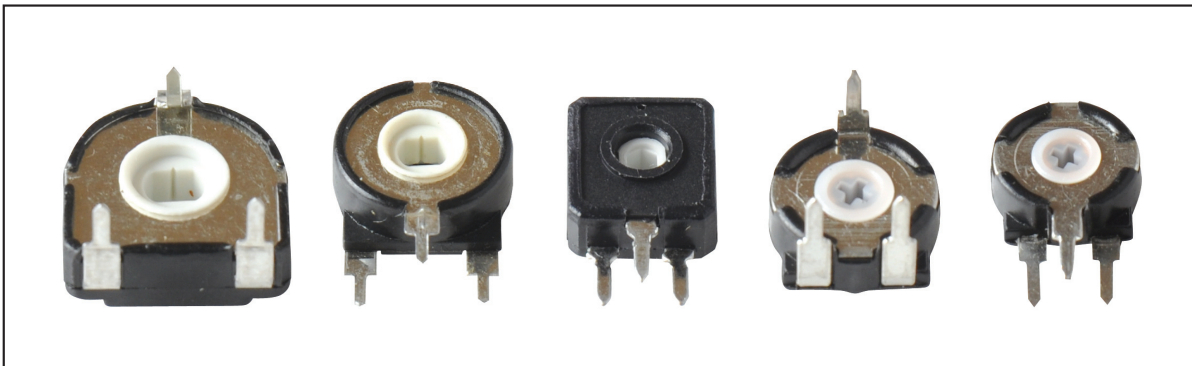
Items	RV 16	
	Single - unit	Dual - unit
Total rotational angle	300° ± 3°	
Rotation torque	30 - 1250gf.cm	
Rotation stopper strength	9gkgf.cm	6gkgf.cm
Push-pull strength	10kgf Max.	
Shaft wobble	0,7 X L/30mm max.	
(Electrical characteristics)		
Total resistance	500 - 1 M Ω	( 15 mm - 20 mm)

# TRIMPOT ÇEŞİTLERİ

\* PT 10

\* PT 15

DİK ALYAN - DİK TORNAVIDA - YATIK ALYAN - YATIK TORNAVIDA ÇEŞİTLERİ



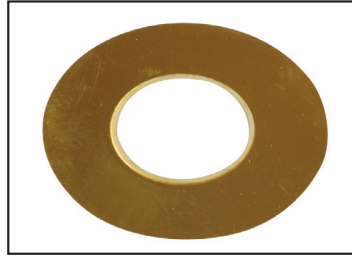
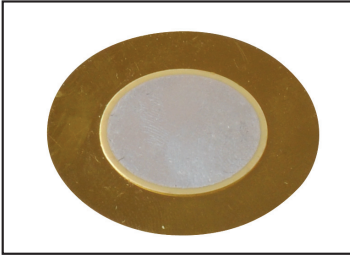


50 mm - 57 mm - 66 mm FERİTLİ  
57 mm PLASTİK ve ALNICO  
HOPARLÖR ÇEŞİTLERİ

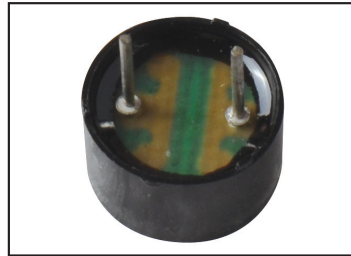
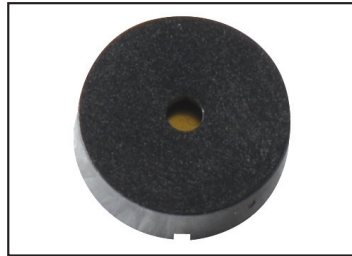
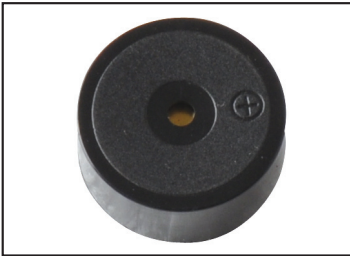


41 mm - 50 mm YAPRAK PIEZO

PLASTİK HOPARLÖR



22 mm - 23 mm DEVRELİ - DEVRESİZ BUZZER

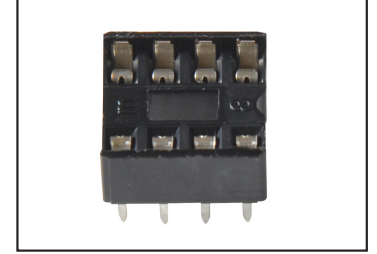
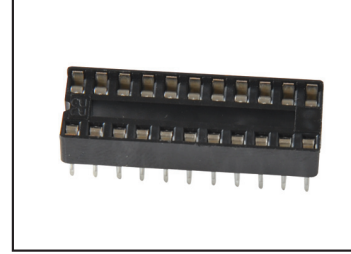
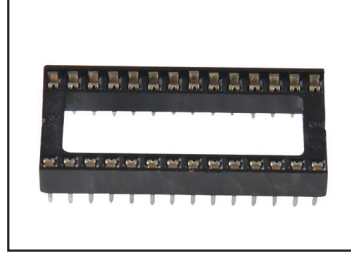
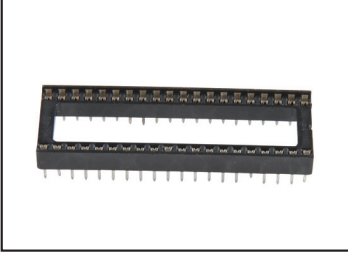


12mm DEVRELİ - DEVRESİZ BUZZER

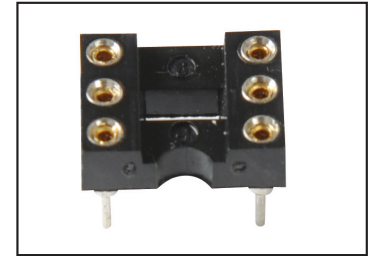
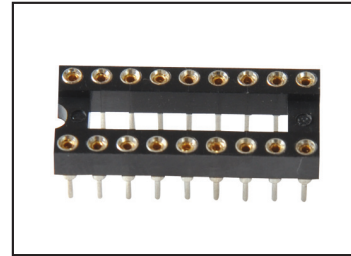
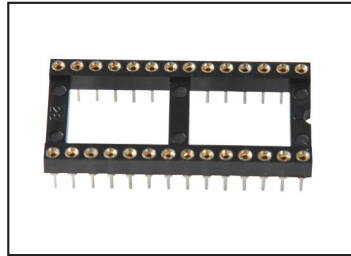
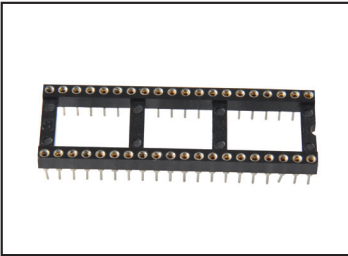
MİKROFON KAPSÜL



### ENTEĞRE SOKETLERİ

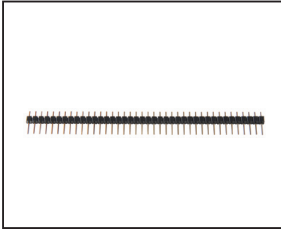


### PRECISION ENTEĞRE SOKETLERİ

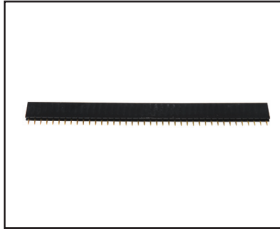


# KONNEKTÖRLER

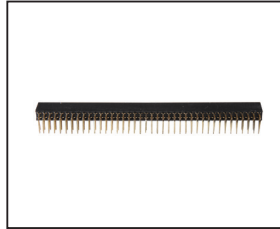
90 - 180 ERKEK PİN HEADER



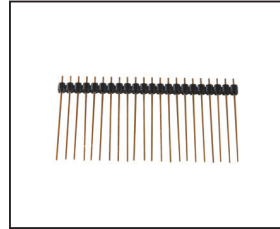
180 DİŞİ PİN HEADER



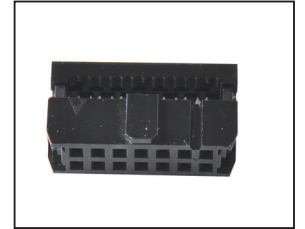
90 DİŞİ PİN HEADER



PİN HEADER 12mm-15mm-19mm



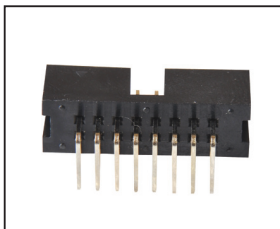
IDC KONNEKTÖR



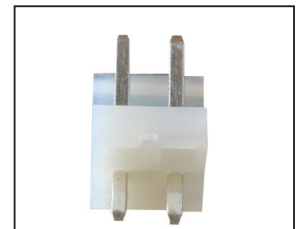
180 BOX HEADER



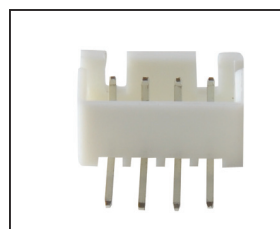
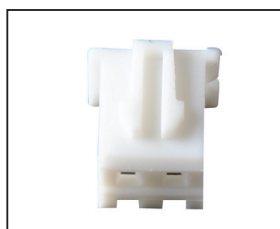
90 BOX HEADER



2,50 - 3,96 mm KONNEKTÖR ÇEŞİTLERİ

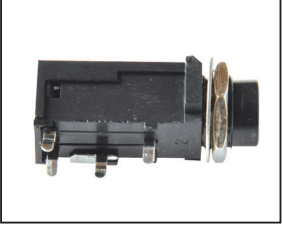


2,50mm - 3,96mm KONNEKTÖR ÇEŞİTLERİ

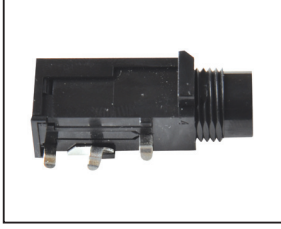




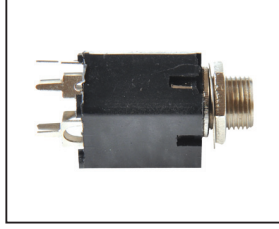
6,3 METAL STEREO JAK



6,3 METAL MONO JAK



DİK ŞASE



MONO GİTAR JAK



STEREO GİTAR JAK



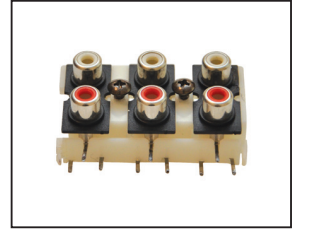
CANON ERKEK



CANON DİŞİ



TOS FİŞ

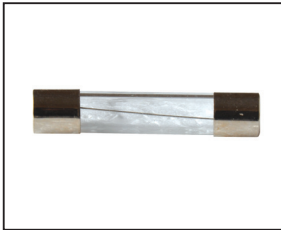


## SİGORTA ÇEŞİTLERİ AYAKLARI VE YUVALARI

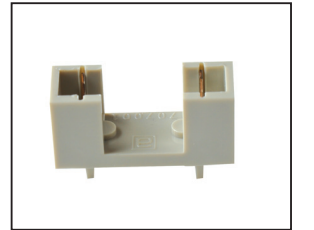
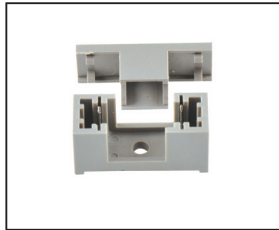
5X20 CAM SİGORTA



6X30 CAM SİGORTA



SİGORTA YUVASI (KART TİPİ)



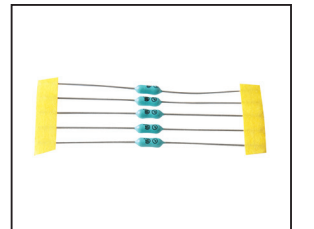
METAL SİGORTA AYAĞI



ŞASE TİPİ SİGORTA YUVASI (5X20) - (6X30)



DİRENÇ TİPİ SİGORTA

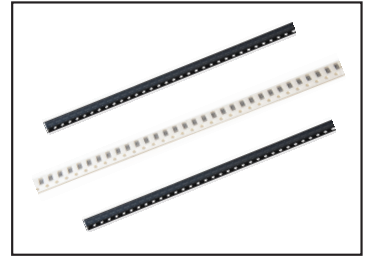


# SMD ÇEŞİTLERİ



EMDAŞ ELEKTRONİK

SMD DİRENÇ, KONDANSATÖR, ZENER, DİYOT, ENTEGRE, LED, TRANSİSTÖR



# DİĞER MALZEMELER

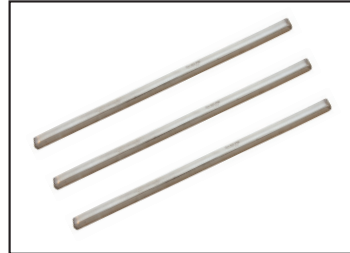
0,75 mm LEHİM



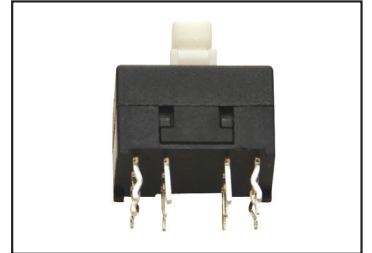
1,2 mm LEHİM



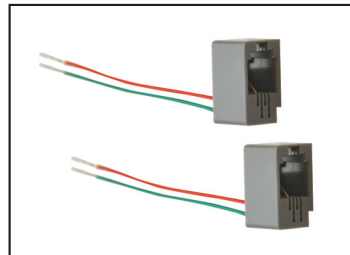
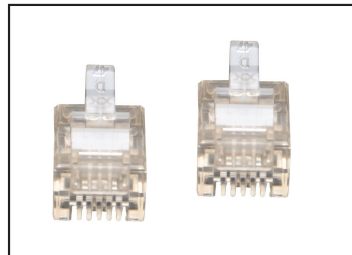
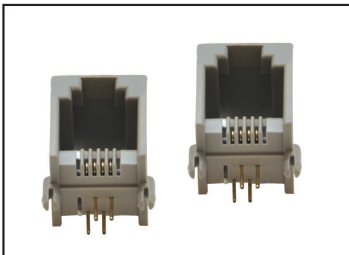
POTA LEHİM



BUTON

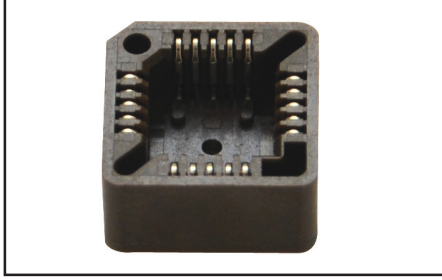


TELEFON SOKETLERİ



BUTON

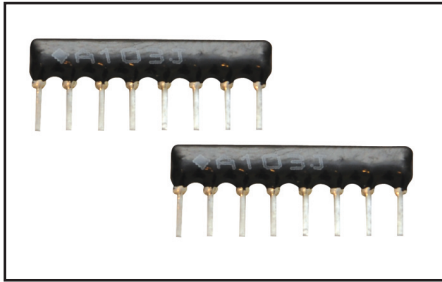
PLCC SOKET



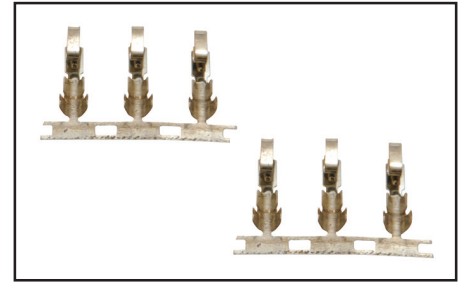
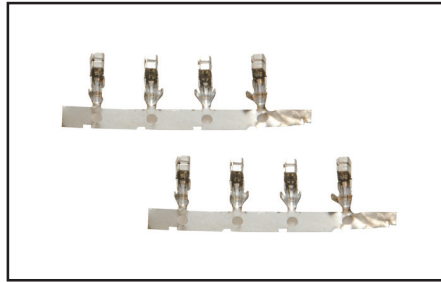
D-SUP KONNEKTÖR



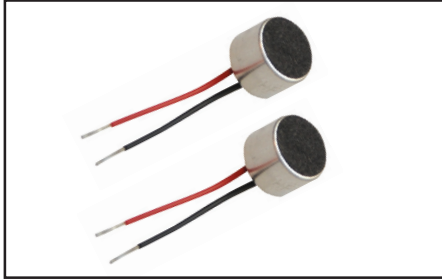
SIRA DİRENÇ



2,54mm - 3,96mm TERMİNAL



MİKROFON KAPSUL



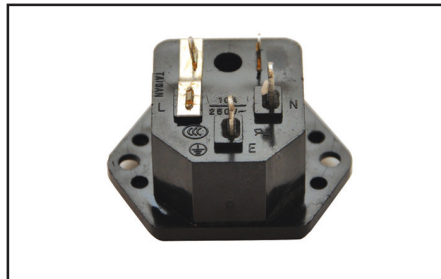
KULAKLIK MİKROFON



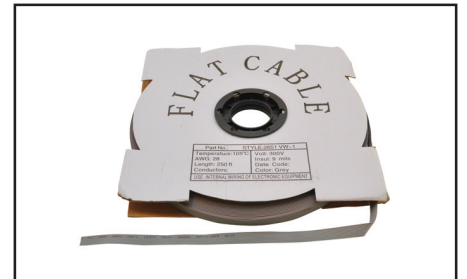
2,1 JAK



POWER ŞASE SOKET



FLAT KABLO

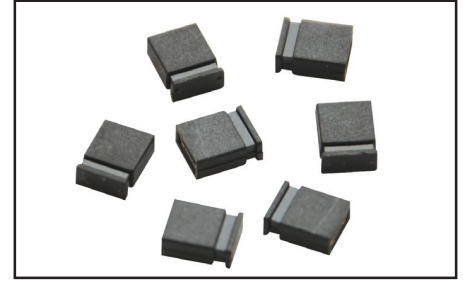




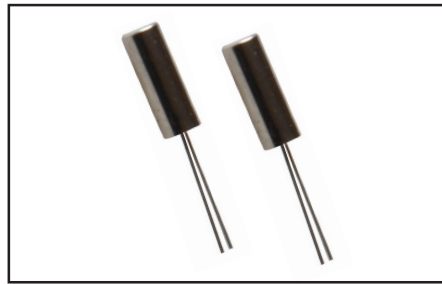
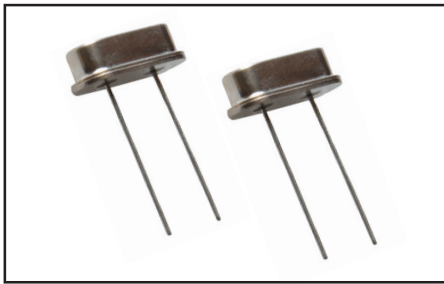
## VARİSTÖR ÇEŞİTLERİ



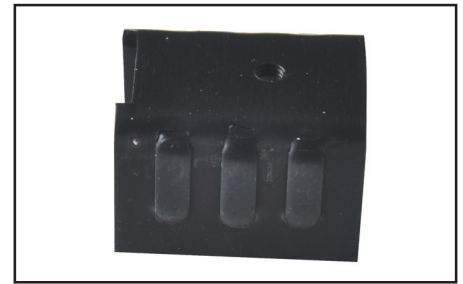
## JUMPER ÇEŞİTLERİ



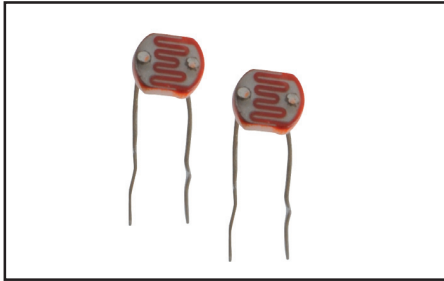
## KRİSTAL ÇEŞİTLERİ



## TR5 SOĞUTUCU



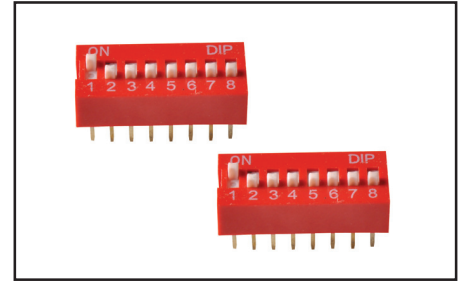
## LDR



## ANAHTAR ÇEŞİTLERİ



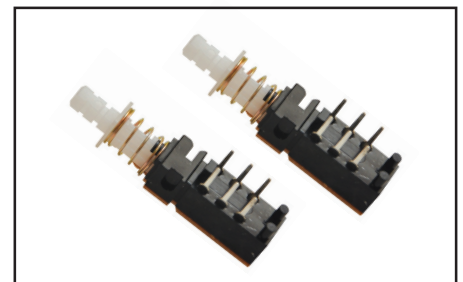
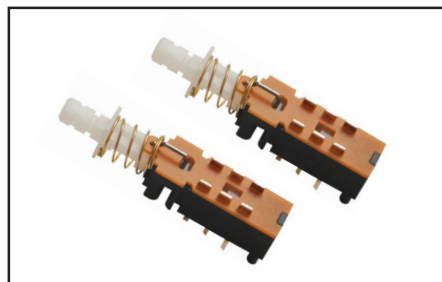
## DIP SWITCH



## METAL REGÜLATÖR



## BUTON ÇEŞİTLERİ





# EMDAŞ ELEKTRONİK

Kemankeş Mh. Erişteci Sk. Küçükbalıklı Han No: 5/6 Karaköy / İstanbul  
Tel : +90 212 249 13 31 - 293 20 18 Fax:+90 212 293 67 04  
**e-mail:** emdas2@ttmail.com **msn:** emdaselektronik@hotmail.com  
**www.emdaselektronik.com**