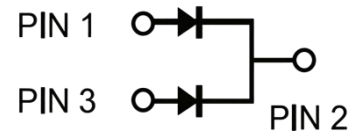


### Schottky Barrier Rectifiers

Parameter	Value	Unit
$V_{RRM}$	45	V
$I_{F(AV)}$	30(2*15)	A

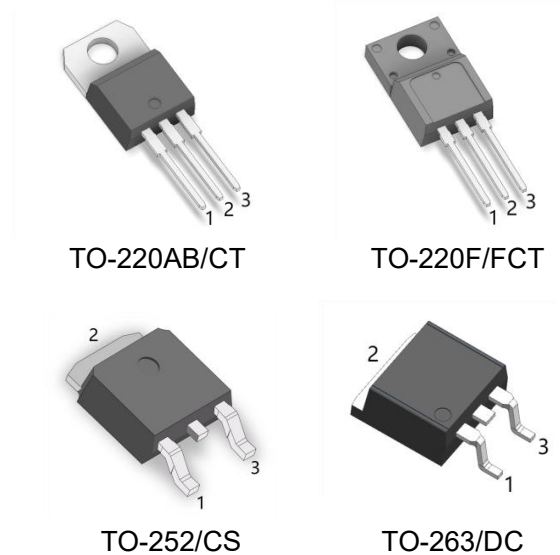


#### Features

- Common cathode structure
- Low power consumption, high efficiency
- Good high-temperature characteristics
- Over voltage protection loop, high reliability

#### Applications

- Power Factor Correction(PFC)
- Switched Mode Power Supply(SMPS)
- Uninterruptible Power Supply(UPS)
- Air Conditioner



#### Absolute Maximum Ratings( $T_c=25^{\circ}\text{C}$ , unless otherwise noted)

Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	45	V
Working Peak Reverse Voltage	$V_{RWM}$	45	V
Maximum DC Blocking Voltage	$V_{DC}$	45	V
Maximum Average Forward Rectified Current	Per Leg	15	A
	Total	30	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	300	A
Maximum Junction Temperature	$T_J$	150	$^{\circ}\text{C}$
Storage Temperature Range	$T_{STG}$	-40 to +150	$^{\circ}\text{C}$
Typical Thermal Resistance	$R_{\theta JC}$	2.0	$^{\circ}\text{C/W}$
TO-220AB, TO-263, TO-252			
TO-220F			

Note1: Thermal resistance from Junction to case per leg mounted on heat sink.

### Electrical Characteristics unless otherwise specified

Parameter		Symbol	Value		Unit
Forward Voltage Drop			Typ.	Max.	V
$I_F=10A$	$T_J=25^{\circ}C$	$V_F$	0.63	0.66	
	$T_J=125^{\circ}C$		0.58	-	
$V_R=V_{RRM}$	$T_J=25^{\circ}C$	$I_R$	8	50	$\mu A$
	$T_J=125^{\circ}C$		5	-	mA

Note2:Pulse test: 300 $\mu s$  pulse width, 1% duty cycle

### Typical Characteristics

FIG. 1 MAXIMUM FORWARD CURRENT DERATING CURVE

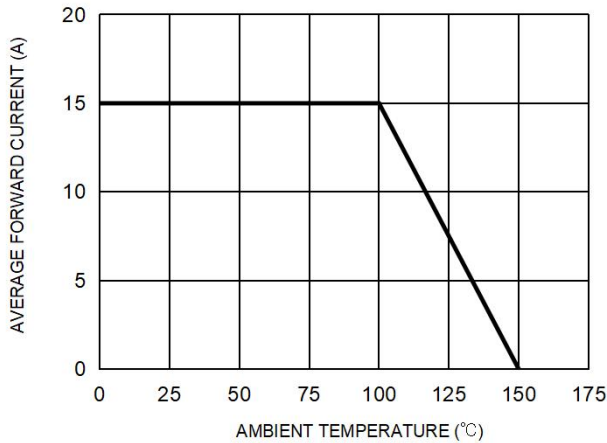


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

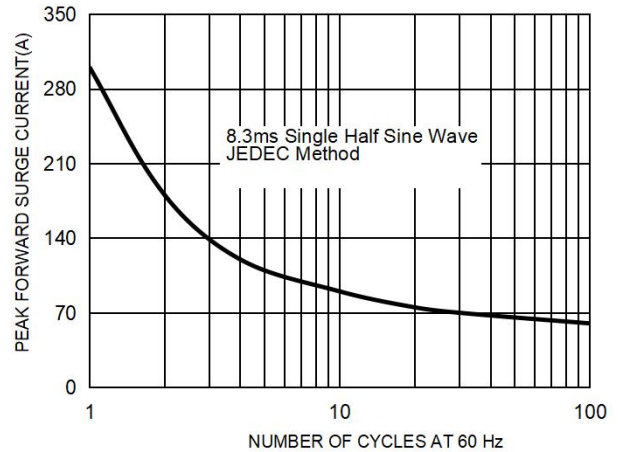


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

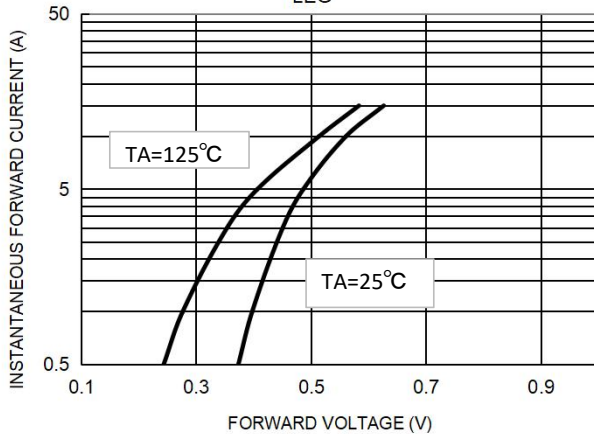
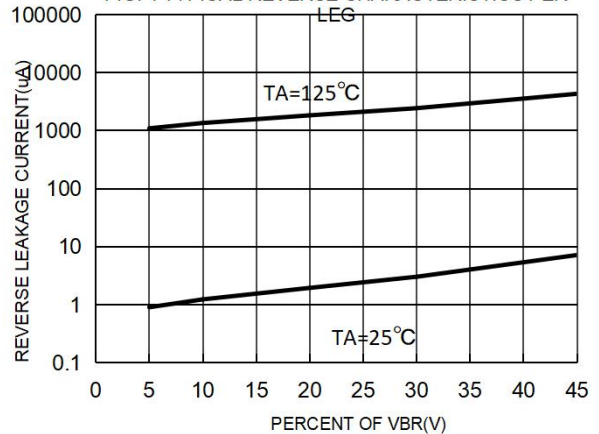
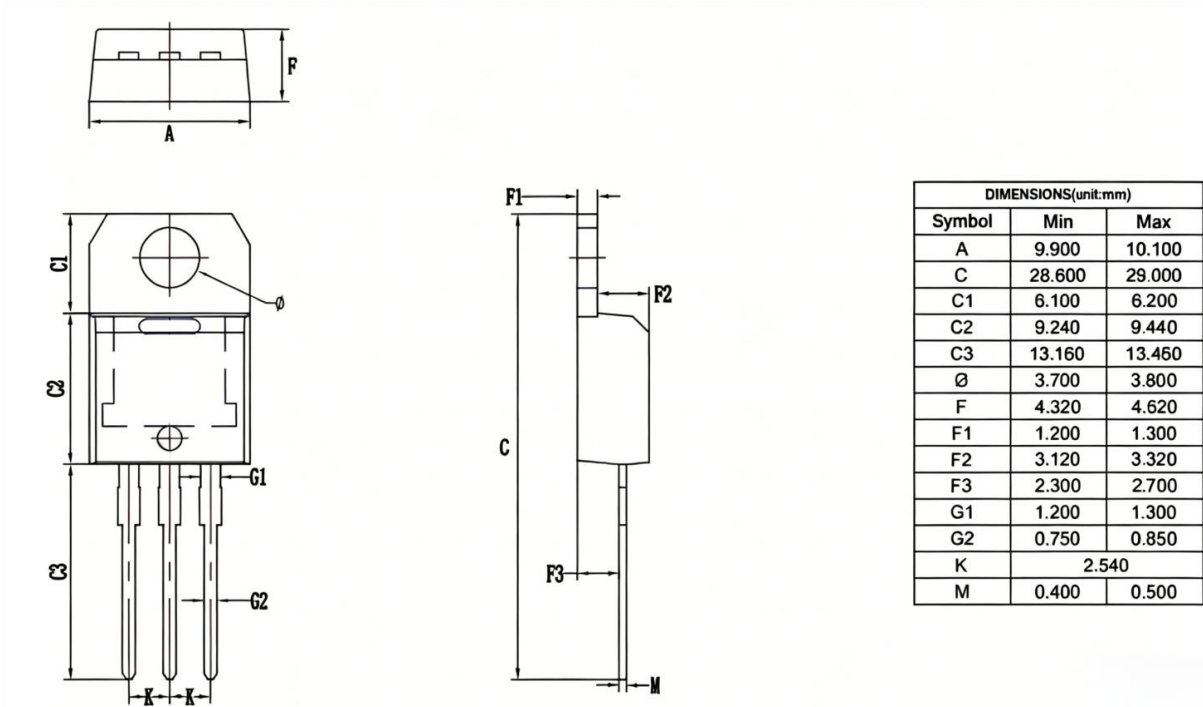


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG

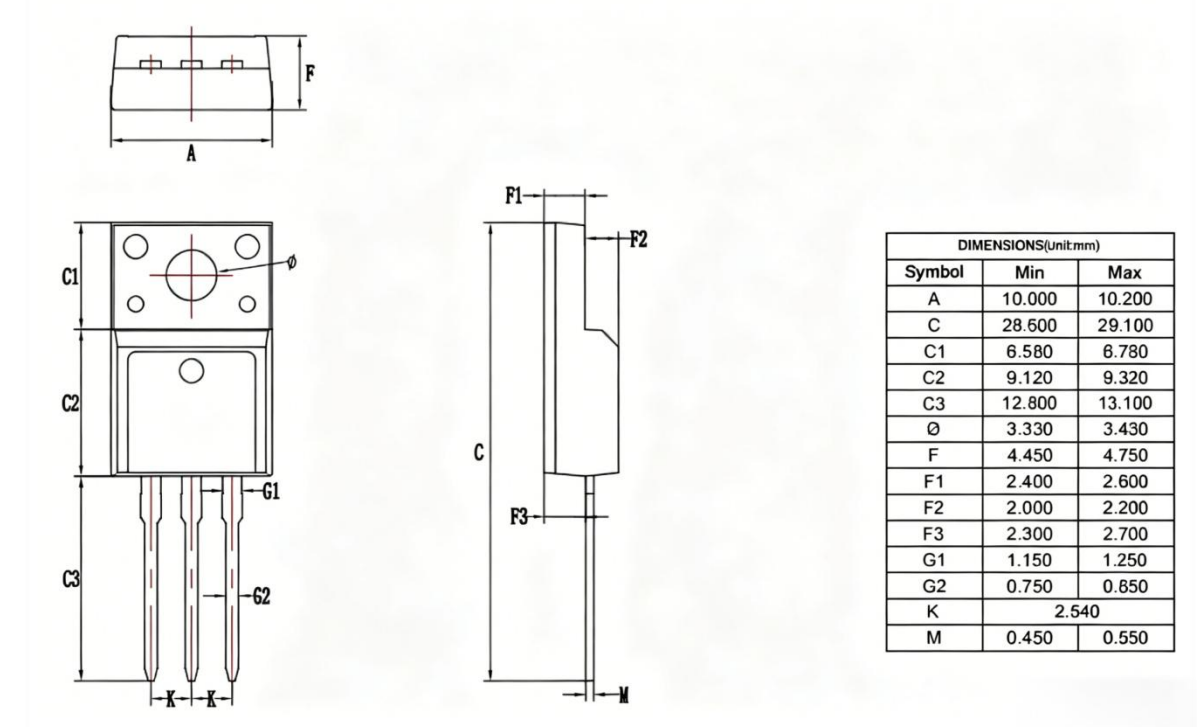


### Package Outlines

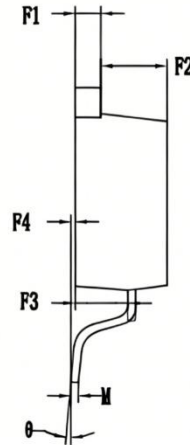
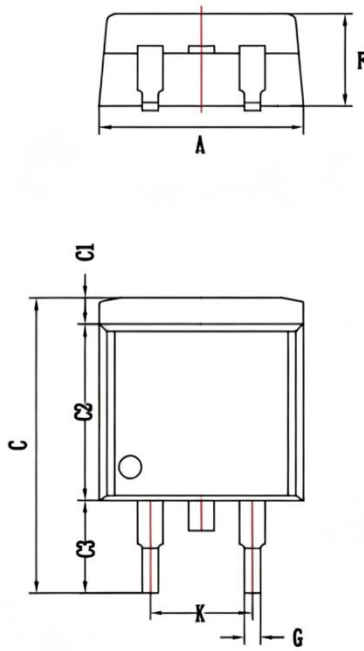
#### TO-220AB



#### TO-220F

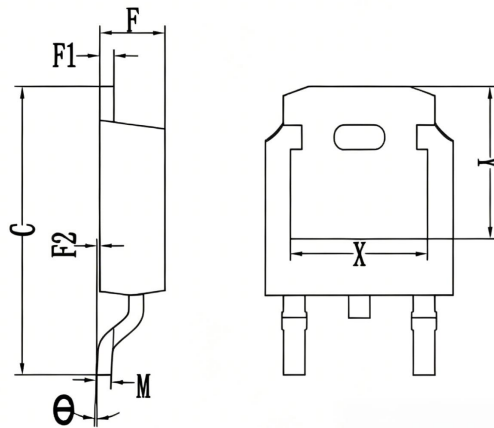
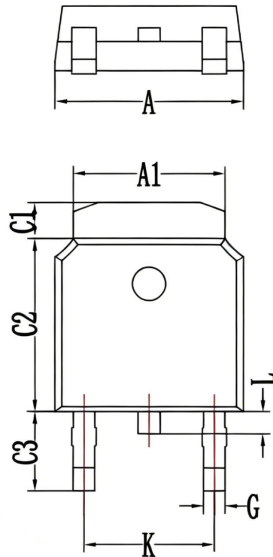


### TO-263



DIMENSIONS(Unit:mm)		
Symbol	Min	Max
A	10.000	10.200
C	14.450	14.850
C1	1.250	1.350
C2	8.640	8.840
C3	4.460	4.760
F	4.420	4.720
F1	1.220	1.320
F2	3.200	3.400
F3	2.470	2.720
F4	0.000	0.200
$\theta$	0°	8°
G	0.750	0.850
K	5.080	
M	0.330	0.430

### TO-252



DIMENSIONS(Unit:mm)		
Symbol	Min	Max
A	6.500	6.700
A1	5.230	5.430
C	10.000	10.400
C1	1.220	1.320
C2	6.000	6.200
C3	2.700	3.000
F	2.200	2.400
F1	0.450	0.550
F2	0.000	0.100
M	0.450	0.550
K	4.550	4.650
G	0.710	0.810
L	0.600	0.900
$\theta$	0°	5°
X	4.650	4.850
Y	5.250	5.550

**\*Important Usage Information and Disclaimer**

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