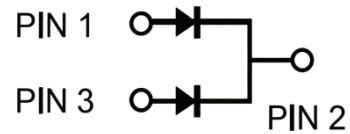


### Schottky Barrier Rectifiers

Parameter	Value	Unit
$V_{RRM}$	150	V
$I_{F(AV)}$	60(2*30)	A



#### Features

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

#### Applications

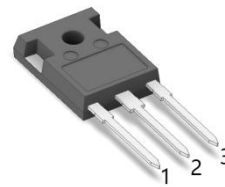
- Power Factor Correction(PFC)
- Switched Mode Power Supply(SMPS)
- Uninterruptible Power Supply(UPS)
- Air Conditioner



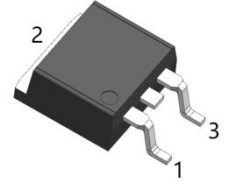
TO-220AB/CT



TO-220F/FCT



TO-247/PT



TO-263/DC

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

Parameter	Symbol	Value	Unit	
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	150	V	
Working Peak Reverse Voltage	$V_{RWM}$	150	V	
Maximum DC Blocking Voltage	$V_{DC}$	150	V	
Maximum Average Forward Rectified Current	Per Leg	30	A	
	Total	60		
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	410	A	
Maximum Junction Temperature	$T_J$	175	$^{\circ}\text{C}$	
Storage Temperature Range	$T_{STG}$	-40 to +150	$^{\circ}\text{C}$	
Typical Thermal Resistance	$R_{\theta JC}$	TO-220AB, TO-263	$^{\circ}\text{C/W}$	
		TO-220F		1.8
		TO-247		3.3
		0.8		

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
$I_F=100\mu A$	$T_J=25^\circ C$	$V_R$	190	210	
$I_F=30A$	$T_J=25^\circ C$	$V_F$	0.86	0.9	
	$T_J=125^\circ C$		-	0.8	
$V_R=V_{RRM}$	$T_J=25^\circ C$	$I_R$	0.5	5.0	$\mu A$
	$T_J=125^\circ C$		-	5.0	mA

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

### Typical Characteristics

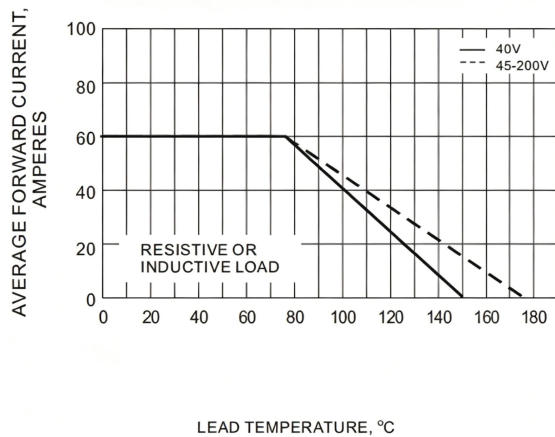


Fig.1- FORWARD CURRENT DERATING CURVE

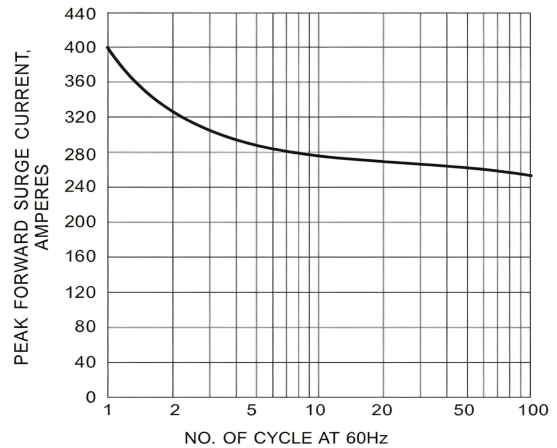


Fig.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

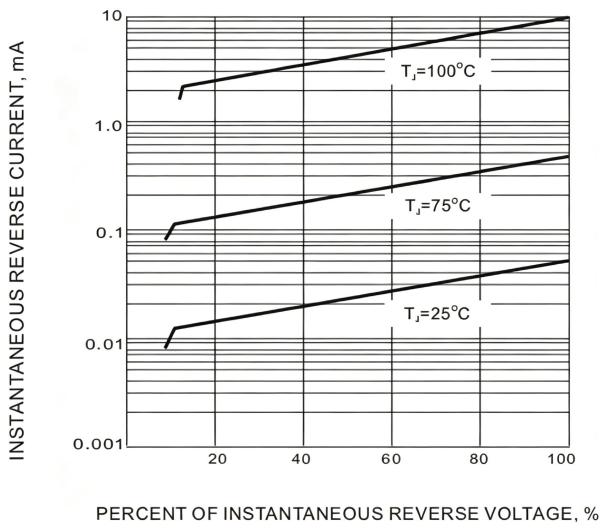


Fig.3- TYPICAL REVERSE CHARACTERISTIC

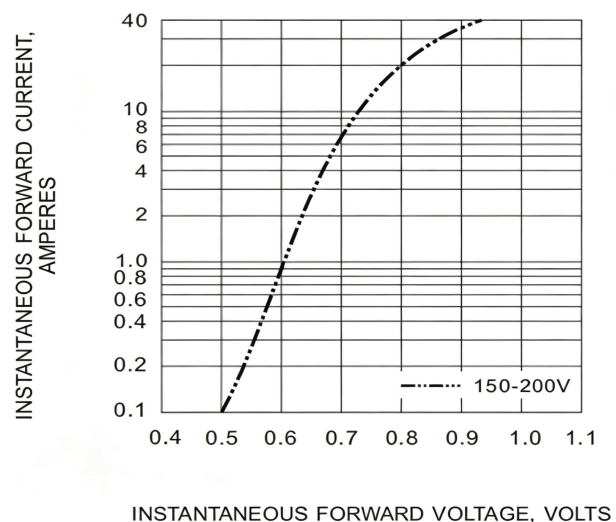
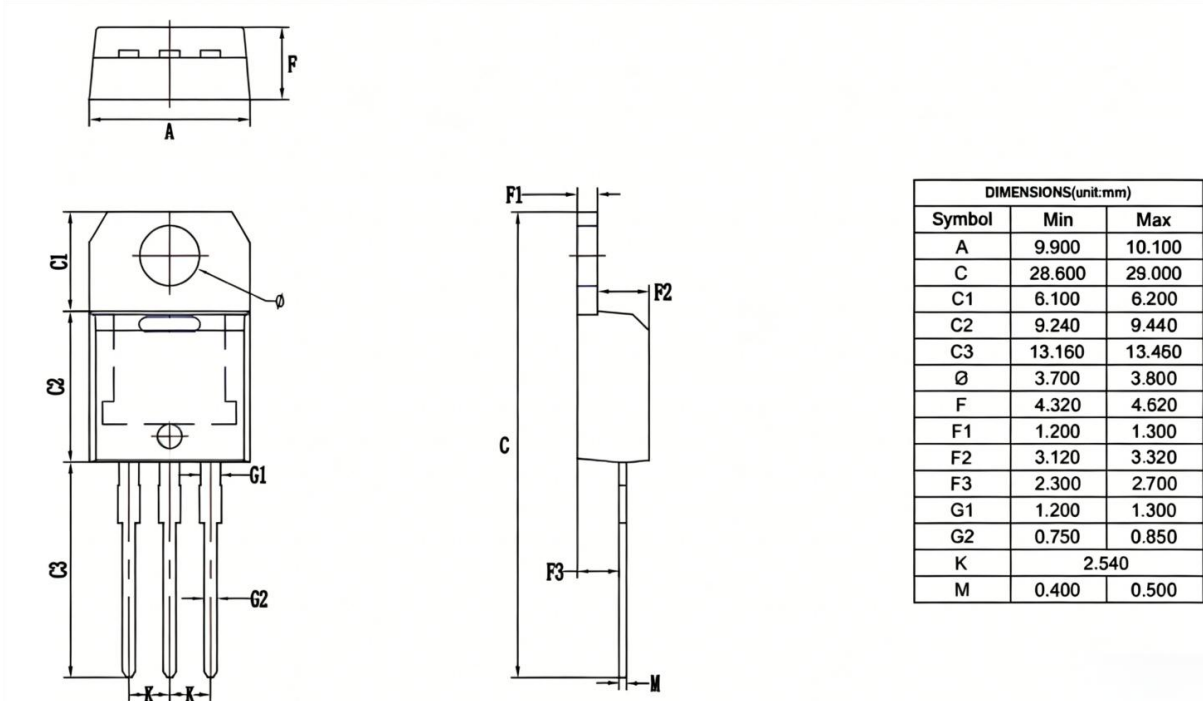


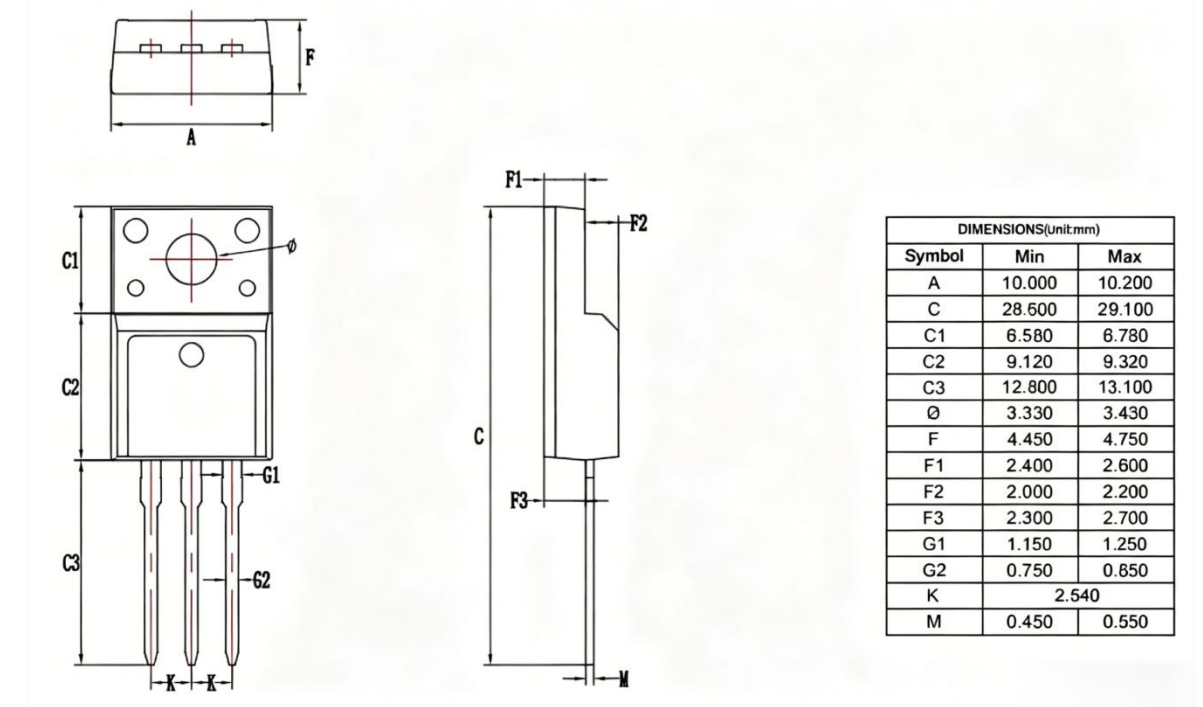
Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

### Package Outlines

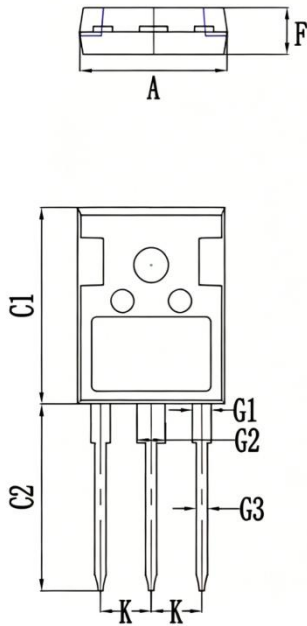
#### TO-220AB



#### TO-220F

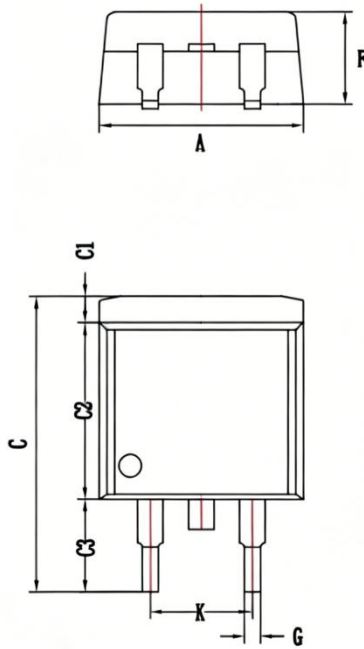


### TO-247



DIMENSIONS(unit:mm)		
Symbol	Min	Max
A	15.650	15.950
C	40.750	41.250
C1	20.850	21.150
C2	19.850	20.150
Ø1	3.700	3.800
Ø2	3.500	3.600
F	4.800	5.200
F1	1.900	2.100
F2	2.200	2.600
G1	1.950	2.050
G2	2.950	3.050
G3	1.150	1.250
K	5.440	
M	0.550	0.650

### 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
θ	0°	8°
G	0.750	0.850
K	5.080	
M	0.330	0.430

**\*Important Usage Information and Disclaimer**

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