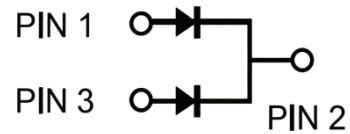


Schottky Barrier Rectifiers

Parameter	Value	Unit
V_{RRM}	45	V
$I_{F(AV)}$	60(2*30)	A

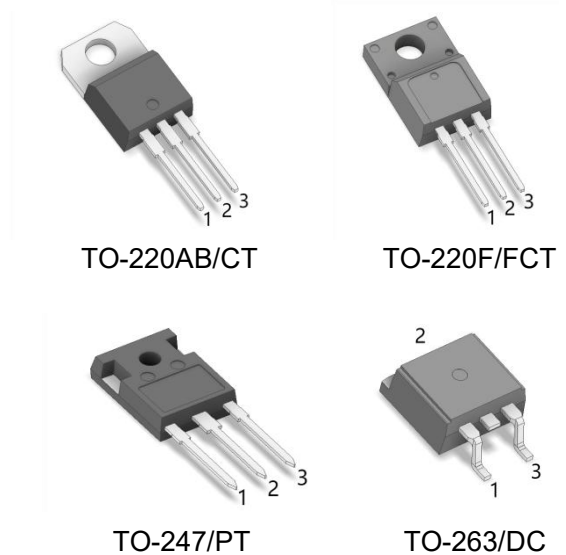


Features

- 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



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	30	A
	Total	60	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	400	A
Maximum Junction Temperature	T_J	175	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ\text{C}$
Typical Thermal Resistance	$R_{\theta JC}$	TO-220AB, TO-263	$^\circ\text{C/W}$
		TO-220F	
		TO-247	
		TO-247	

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.	
$I_F=100\mu A$	$T_J=25^\circ C$	V_R	54	-	V
$I_F=30A$	$T_J=25^\circ C$	V_F	0.52	0.6	
	$T_J=125^\circ C$		0.45	0.55	
$V_R=V_{RRM}$	$T_J=25^\circ C$	I_R	20	40	μA
	$T_J=125^\circ C$		-	10	mA

Note2:Pulse test: 300 μs pulse width, 1% duty cycle

Typical Characteristics

Fig 1. Forward Current Derating Curve

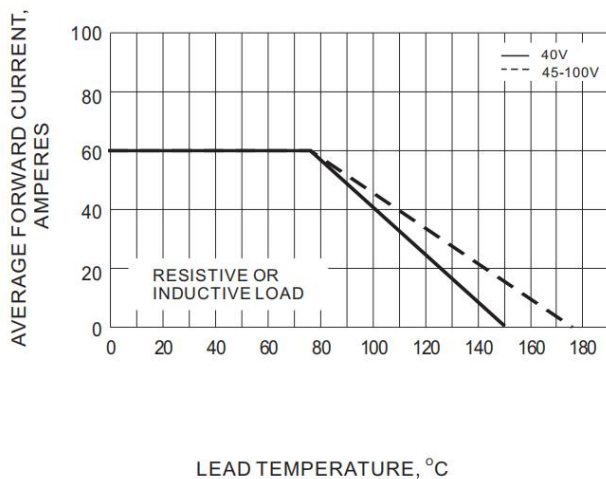


Fig 2. Maximum Non-Repetitive Surge Current

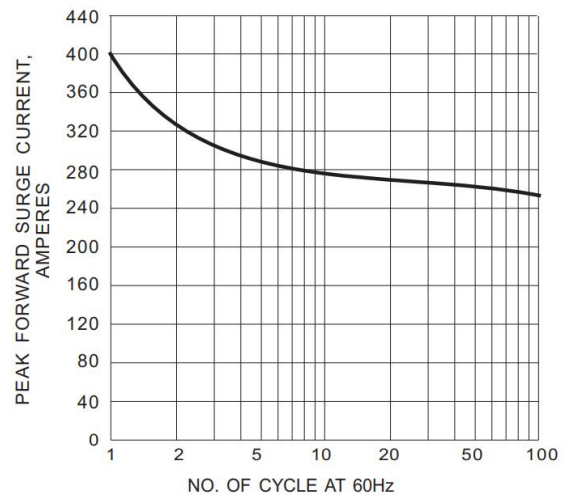


Fig 3. Typical Reverse Characteristic

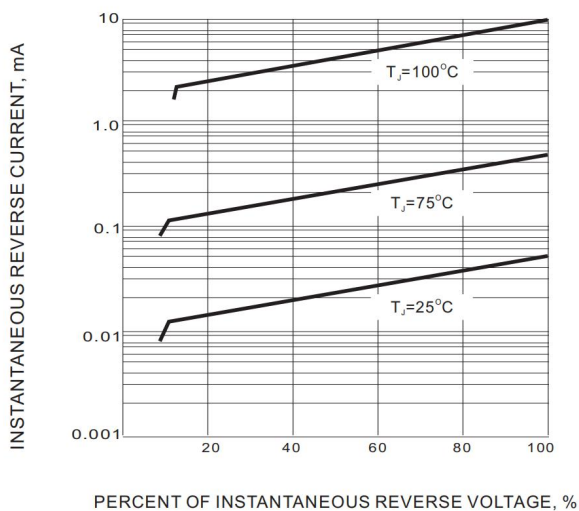
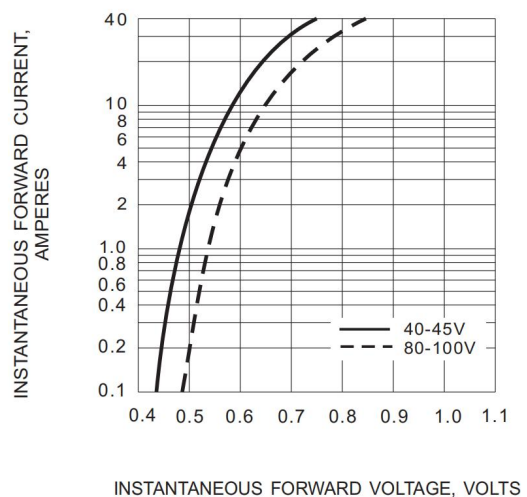
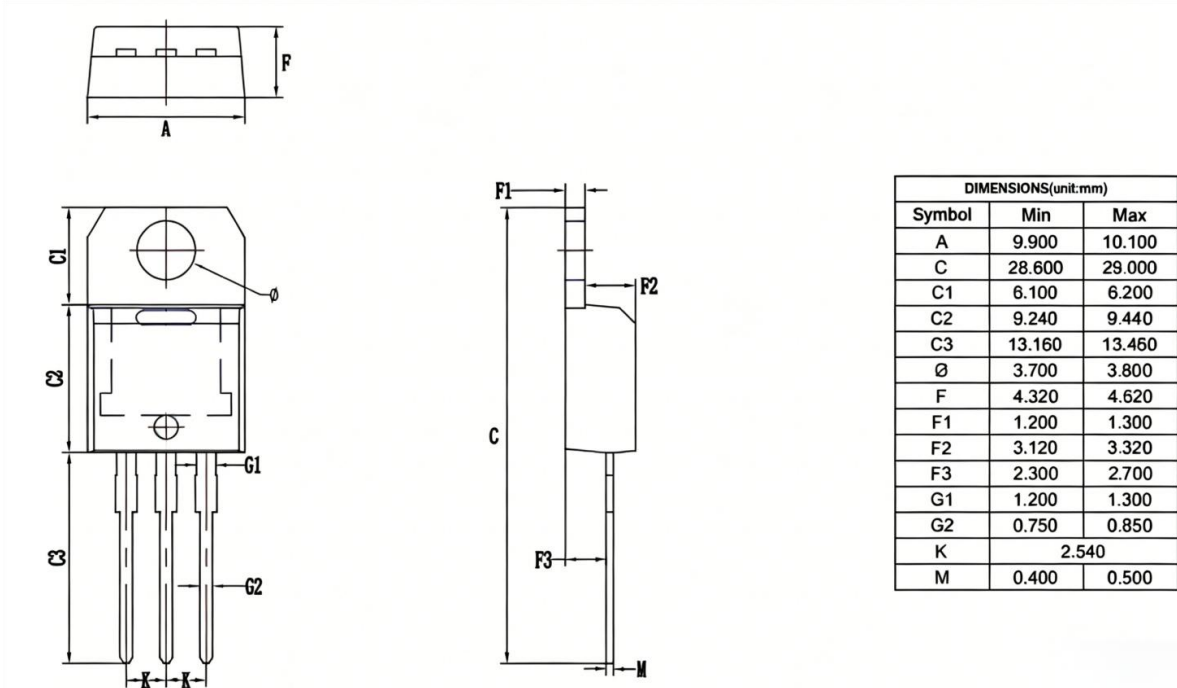


Fig 4. Typical Instantaneous Forward Characteristic

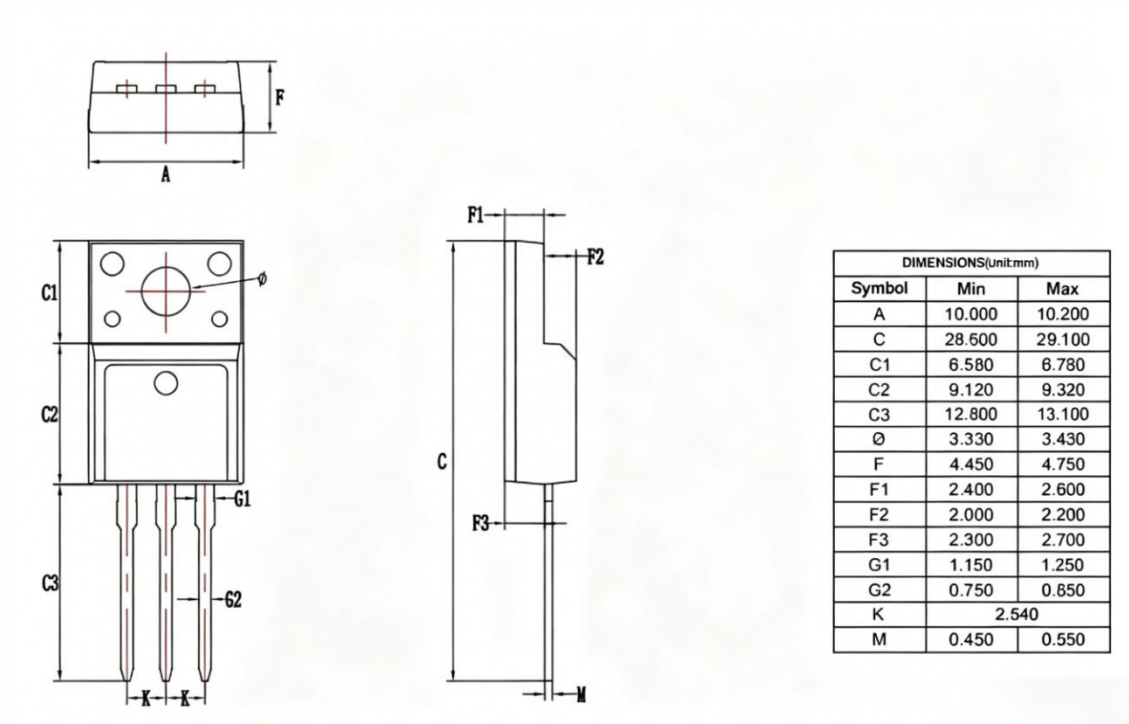


Package Outlines

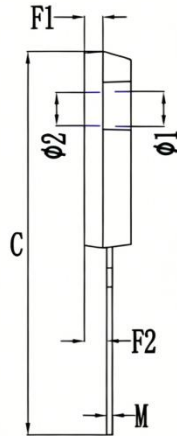
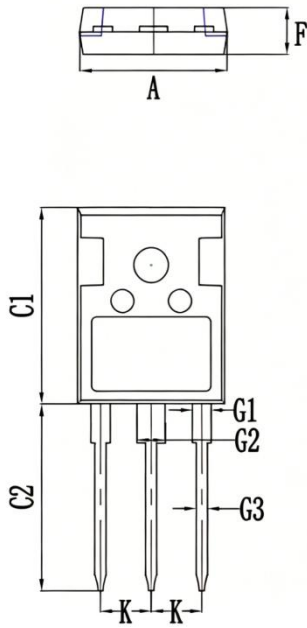
TO-220AB



TO-220F

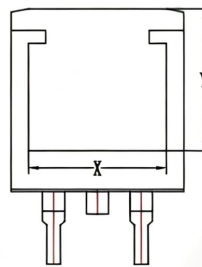
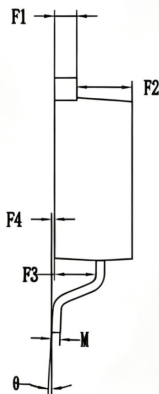
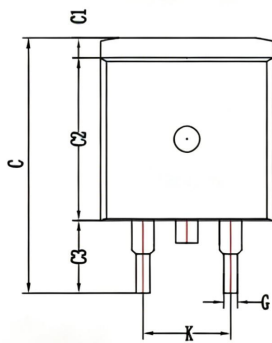
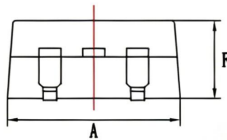


TO-247



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
$\phi 1$	3.700	3.800
$\phi 2$	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	9.900	10.100
C	15.250	15.650
C1	1.100	1.200
C2	9.300	9.500
C3	4.750	5.150
F	4.350	4.650
F1	1.250	1.350
F2	3.100	3.300
F3	2.250	2.550
F4	0.000	0.200
B	0°	8°
G	0.750	0.850
K	5.080	
M	0.450	0.550
X	7.850	8.150
Y	8.050	8.350

ESD SENSITIVE

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