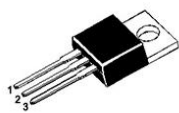


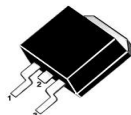
SCHOTTKY BARRIER RECTIFIER



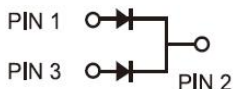
TO-220AB/CT



TO-220F/FCT



TO-263/DC



FEATURES

- Low forward voltage
- High current capability
- High forward surge capability
- Low power losses, High efficiency
- Guarding for over voltage protection

APPLICATIONS

Low VF Schottky barrier rectifier are designed for high frequency, miniature switched mode power supplies such as adapters ,lighting and on-board DC/DC conerters

Primary Characteristic

I_O	2*5A
V_{RRM}	100V
I_{FSM}	150A
V_F	0.68V
T_{jmax}	150°C

MECHANICAL DATA

- **Case:** Molded plastic
- **Polarity:** As marked
- **Mounting Position:** Any
- **Molded Plastic:** UL Flammability Classification Rating 94V-0
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Solder bath temperature 275°C maximum, 10s per JESD 22-B106

Maximum Ratings (Per Leg) at Ta=25°C unless otherwise specified

Characteristics	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Working Peak Reverse Voltage	V_{RWM}	100	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Maximum Average Forward Rectified Current	Per Leg	5	A
	Total	10	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave	I_{FSM}	150	A
Operating Temperature Range	T_J	150	°C
Storage Temperature Range	T_{STG}	-40 to +150	°C
Typical Thermal Resistance (Note1)	$R_{\theta JC}$	2	°C/W
TO-220AB, TO-263		4	
TO-220F			

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

Electrical Characteristics (Per Leg) unless otherwise specified

Characteristics		Symbol	Value		Unit
Forward Voltage Drop(Note2)		V _F	Typ.	Max.	V
at I _F =2A	TA=25°C		0.73	-	
	TA=125°C		0.59	-	
at I _F =3A	TA=25°C		0.76	-	
	TA=125°C		0.63	-	
at I _F =5A	TA=25°C		0.80	0.85	
	TA=125°C		0.68	-	
Maximum Reverse Current at V _R =100V	TA=25°C	I _R	5	20	μA
	TA=125°C		1.0	-	mA

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

RATINGS AND CHARACTERISTIC CURVES

Fig.1 TYPICAL FORWARD CURRENT DERATING CURVE

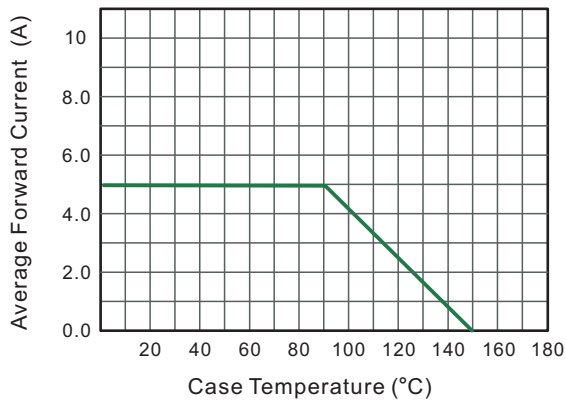


Fig.2 Typical Reverse Characteristics

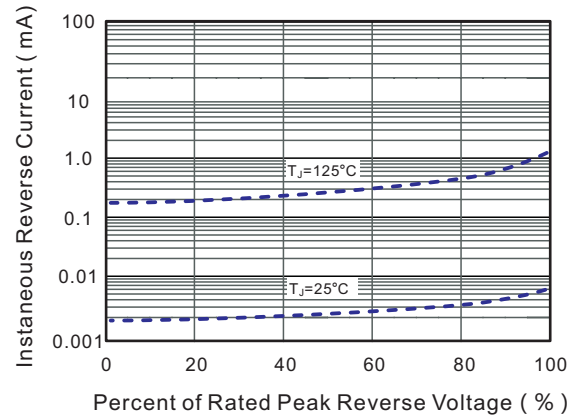


Fig.3 Typical Forward Characteristic

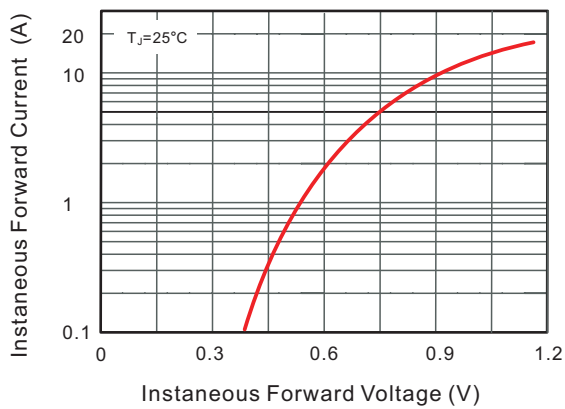
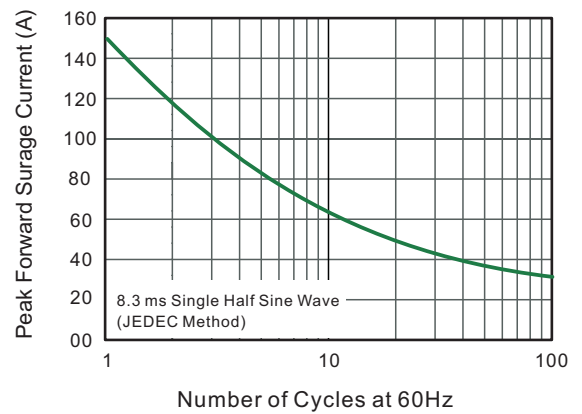
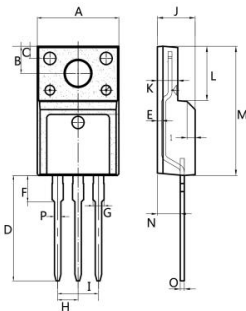


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

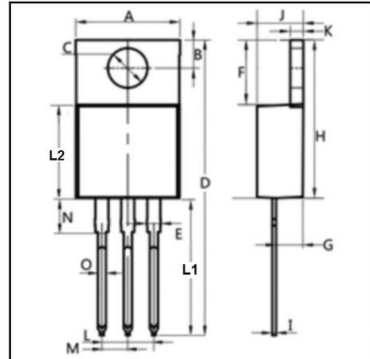


Package Outline Dimensions millimeters

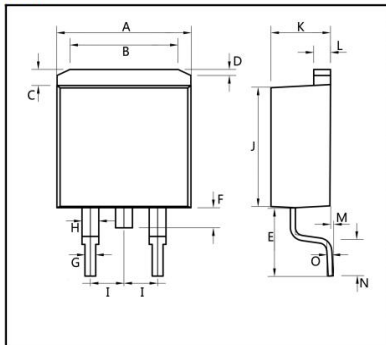
TO-220F

	Dim.	Min.	Max.
	A	9.95	10.25
	B	2.95	3.25
	C	1.25	1.45
	D	12.80	13.20
	E	0.40	0.60
	F	2.8	3.5
	G	1.30	1.45
	H	Typ 2.54	
	I	Typ 5.08	
	J	4.60	4.75
	K	2.45	2.65
	L	6.5	6.8
	M	15.4	16.0
	N	2.75	3.05
	O	0.45	0.55
	P	0.70	0.90
	All Dimensions in millimeter		

TO-220AB

	Dim.	Min.	Max.
A	10.15	10.35	
B	2.50	2.95	
C	3.70	3.90	
D	28.5	29.5	
E	1.20	1.40	
F	6.20	6.55	
G	2.4	2.6	
H	15.0	16.0	
I	0.35	0.42	
J	4.3	4.55	
K	1.25	1.35	
L	Typ5.08		
L1	13	14	
L2	8.5	9.5	
M	Typ2.54		
N	2.8	3.5	
O	0.70	0.90	
All Dimensions in millimeter			

TO-263

	Dim.	Min.	Max.
	A	10.15	10.35
	B	6	8
	C	1.2	1.5
	D	0.55	1.0
	E	5.0	6.0
	F	1.4	1.6
	G	0.75	0.85
	H	1.2	1.5
	I	Typ2.54	
	J	8.5	9.5
	K	4.3	4.55
	L	1.25	1.35
	M	0.02	0.23
	N	2.2	2.8
	O	0.30	0.40
All Dimensions in millimeter			