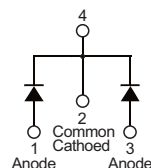




VR(@IC=0.5mA)	100V
VF(@IF=5A)	0.83V
IR(@VR=100V)	20uA
ID	10A

Symbol

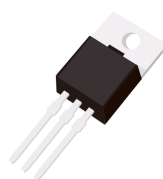


MECHANICAL CHARACTERISTICS

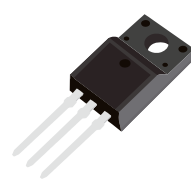
- * Case: Epoxy, Molded
- * Finish: All External Surfaces Corrosion Resistant and Terminal
- * Leads are Readily Solderable
- * Lead Temperature for Soldering Purposes:
260 °C Max. for 10 Seconds

FEATURES

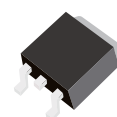
- * Guard Ring for Stress Protection
- * Low Forward Voltage
- * Low Power Loss/High Efficiency
- * High Surge Capacity
- * Low Stored Charge Majority Carrier Conduction
- * Pb Free Packages are Available*



TO-220



TO-220F



TO-263

ORDER INFORMATION

Order codes		Package	Packing
Halogen-Free	Halogen		
N/A	MBR10100F	TO-220F	50 pieces/Tube
N/A	MBR10100A	TO-220	50 pieces/Tube
N/A	MBR10100E	TO-263	800 pieces/reel

MAIMUM RATINGS (Each Diode Leg)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	100	V
Average Rectified Output Current	(Total)	10	A
	(per Leg)	5	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Reate Load	I_{FSM}	150	A
Operationg and Storage Temperature Range	T_J, T_{STG}	-55 to + 175	°C

ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	Test Conditions	Min	Typ.	Max	Unit
Peak Repetitive Reverse Voltage	B_V	$I_C=0.5mA$ $T_J=25^\circ C$	—	110	—	V
Forward Voltage Drop	V_F	$I_F=5A$, $T_J=25^\circ C$	—	0.77	0.83	V
Leakage Current	I_R	$V_R=100V$, $T_J=25^\circ C$	—	—	0.02	mA
		$V_R=100V$, $T_J=125^\circ C$	—	—	6	

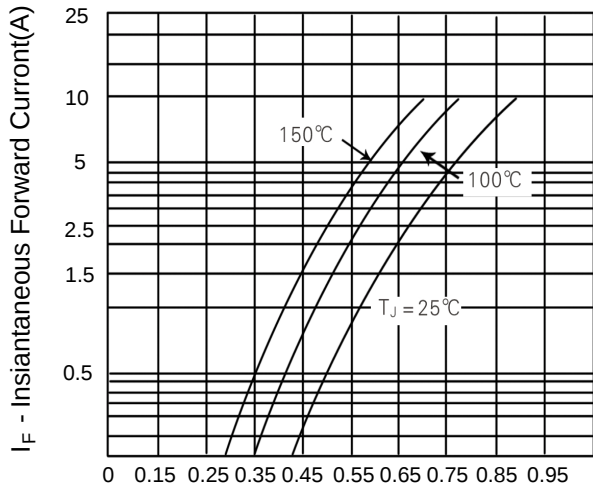


Figure 1. Typical Forward Voltage Per Diode

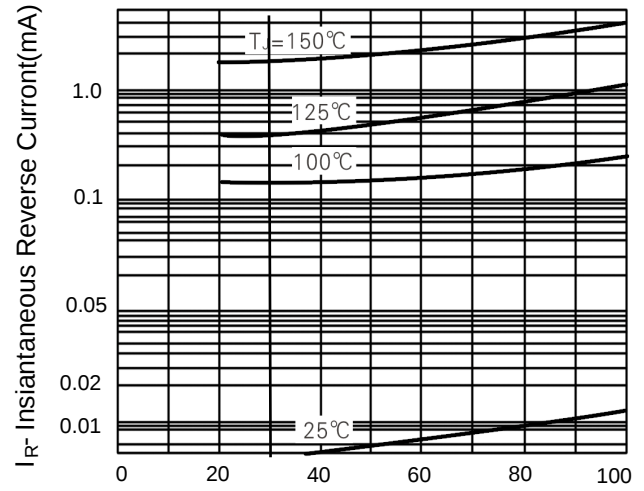


Figure 2. Typical Reverse Current Per Diode

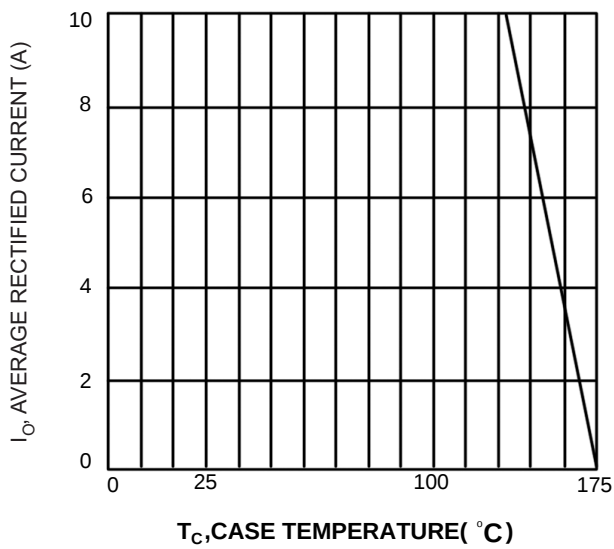


Fig.3 Forward Current Derating Curve

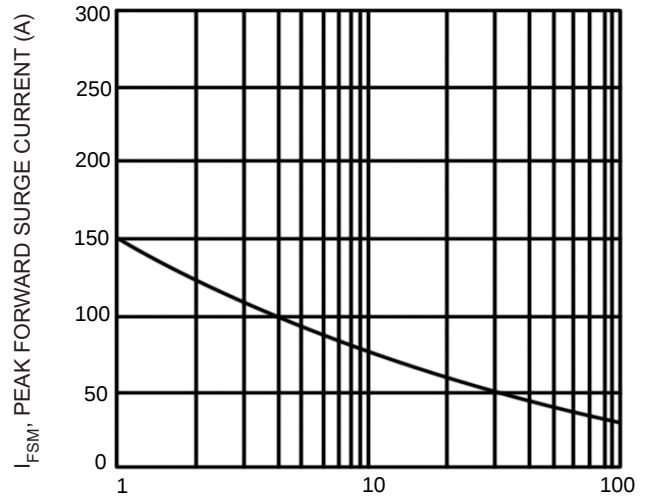


Fig.4 Max Non-Repetitive Surge Current

Technical drawing of a mechanical part, showing three views: front, top, and side. The drawing includes dimensions and tolerances.

Front View Dimensions:

- Overall width: 10.06 ± 0.15
- Overall height: 15.87 ± 0.15
- Top flange width: 7.00 ± 0.15
- Top flange thickness: 3.30
- Central circular feature diameter: 8.0
- Pin diameter: $3 \times \phi 1.50 \pm 0.15$
- Pin spacing (center-to-center): 6.10 ± 0.1
- Pin length (from top flange): 12.93 ± 0.3
- Pin diameter at base: 0.80
- Pin diameter at top: $3 \times 1.38 \pm 0.1$
- Pin length (from base): (9.75)
- Pin diameter at top (alternative): (3.18)
- Pin diameter at base (alternative): 2.54
- Pin diameter at base (alternative): 2.54

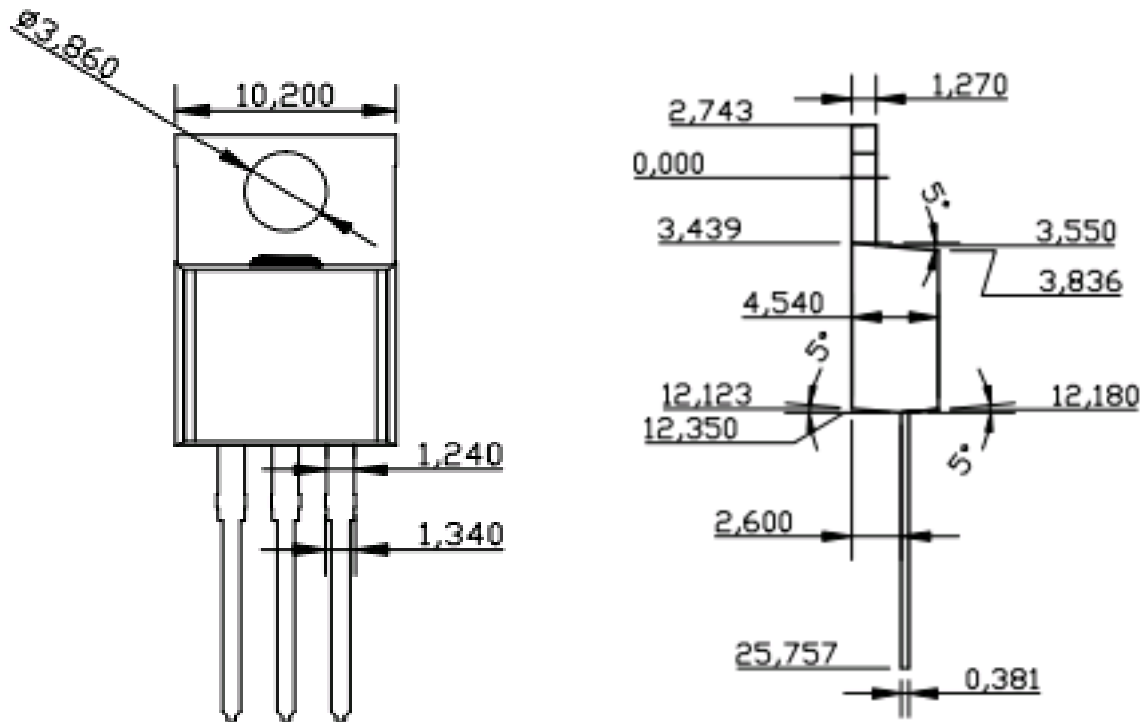
Top View Dimensions:

- Overall width: 10.06 ± 0.15
- Overall height: 15.87 ± 0.15
- Top flange width: 7.00 ± 0.15
- Top flange thickness: 3.30
- Central circular feature diameter: 8.0
- Pin diameter: $3 \times \phi 1.50 \pm 0.15$
- Pin spacing (center-to-center): 6.10 ± 0.1
- Pin length (from top flange): 12.93 ± 0.3
- Pin diameter at base: 0.80
- Pin length (from base): (9.75)
- Pin diameter at top: $3 \times 1.38 \pm 0.1$
- Pin diameter at base (alternative): 2.54
- Pin diameter at base (alternative): 2.54

Side View Dimensions:

- Overall width: 4.70 ± 0.1
- Overall height: 6.68 ± 0.1
- Top flange width: 2.54 ± 0.15
- Top flange thickness: 3.30
- Central circular feature diameter: 8.0
- Pin diameter: $3 \times \phi 1.50 \pm 0.15$
- Pin spacing (center-to-center): 6.10 ± 0.1
- Pin length (from top flange): 12.93 ± 0.3
- Pin diameter at base: 0.80
- Pin length (from base): (9.75)
- Pin diameter at top: $3 \times 1.38 \pm 0.1$
- Pin diameter at base (alternative): 2.54
- Pin diameter at base (alternative): 2.54

■ TO-220-3L PACKAGE OUTLINE DIMENSIONS



■ TO-263-2L PACKAGE OUTLINE DIMENSIONS

