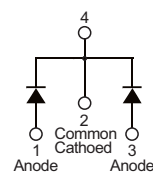


■ PRODUCT CHARACTERISTICS

VR(@IC=0.5mA)	100V
VF(@IF=15A)	0.85V
IR(@VR=100V)	50uA
ID	30A

Symbol



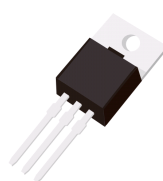
■ MECHANICAL CHARACTERISTICS

- * 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

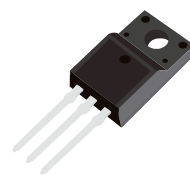
■ FEATURES

- * 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*

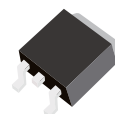
(per Leg)



TO-220



TO-220F



TO-263

■ ORDER INFORMATION

Order codes		Package	Packing
Halogen-Free	Halogen		
N/A	MBR30100F	TO-220F	50 pieces/Tube
N/A	MBR30100A	TO-220	50 pieces/Tube
N/A	MBR30100E	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)	30	A
	(per Leg)	15	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Reate Load	I_{FSM}	300	A
Operating 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	$I_C=0.5mA, T_J=25^{\circ}C$	—	108	—	V
Forward Voltage Drop	V_F	$I_F=15A, T_J=25^{\circ}C$	—	0.82	0.85	V
Leakage Current	I_R	$V_R=100V, T_J=25^{\circ}C$	—	—	0.05	mA
		$V_R=100V, T_J=125^{\circ}C$	—	—	6	

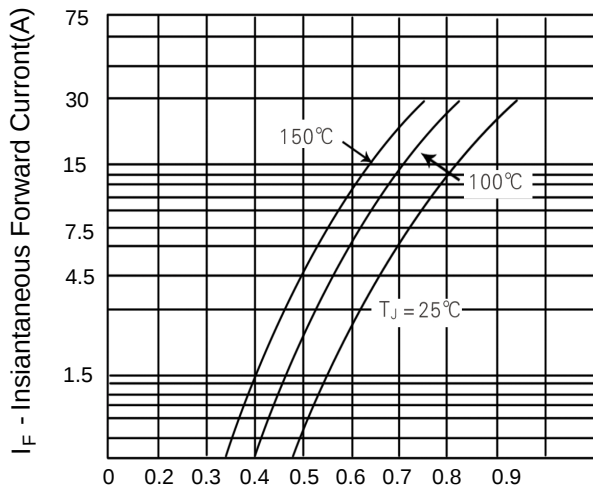


Figure 1. Typical Forward Voltage Per Diode

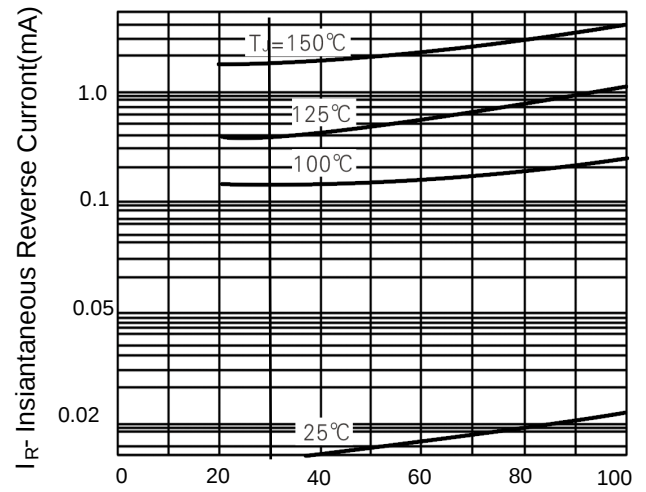


Figure 2. Typical Reverse Current Per Diode

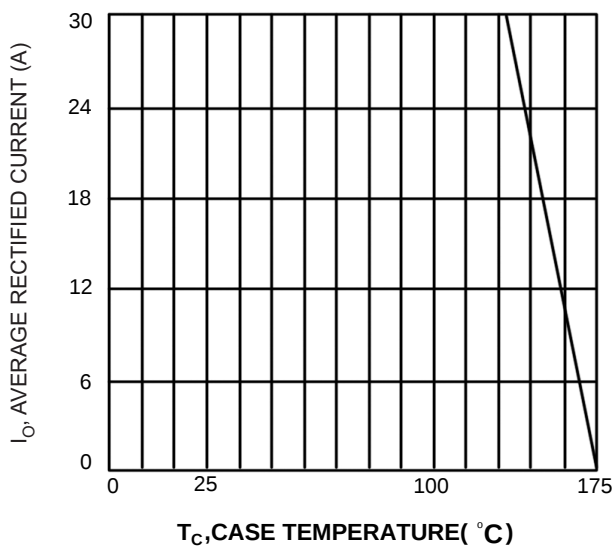


Fig.3 Forward Current Derating Curve

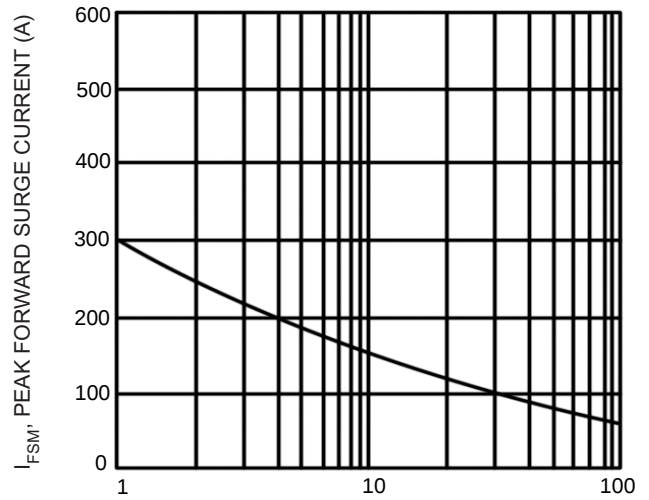
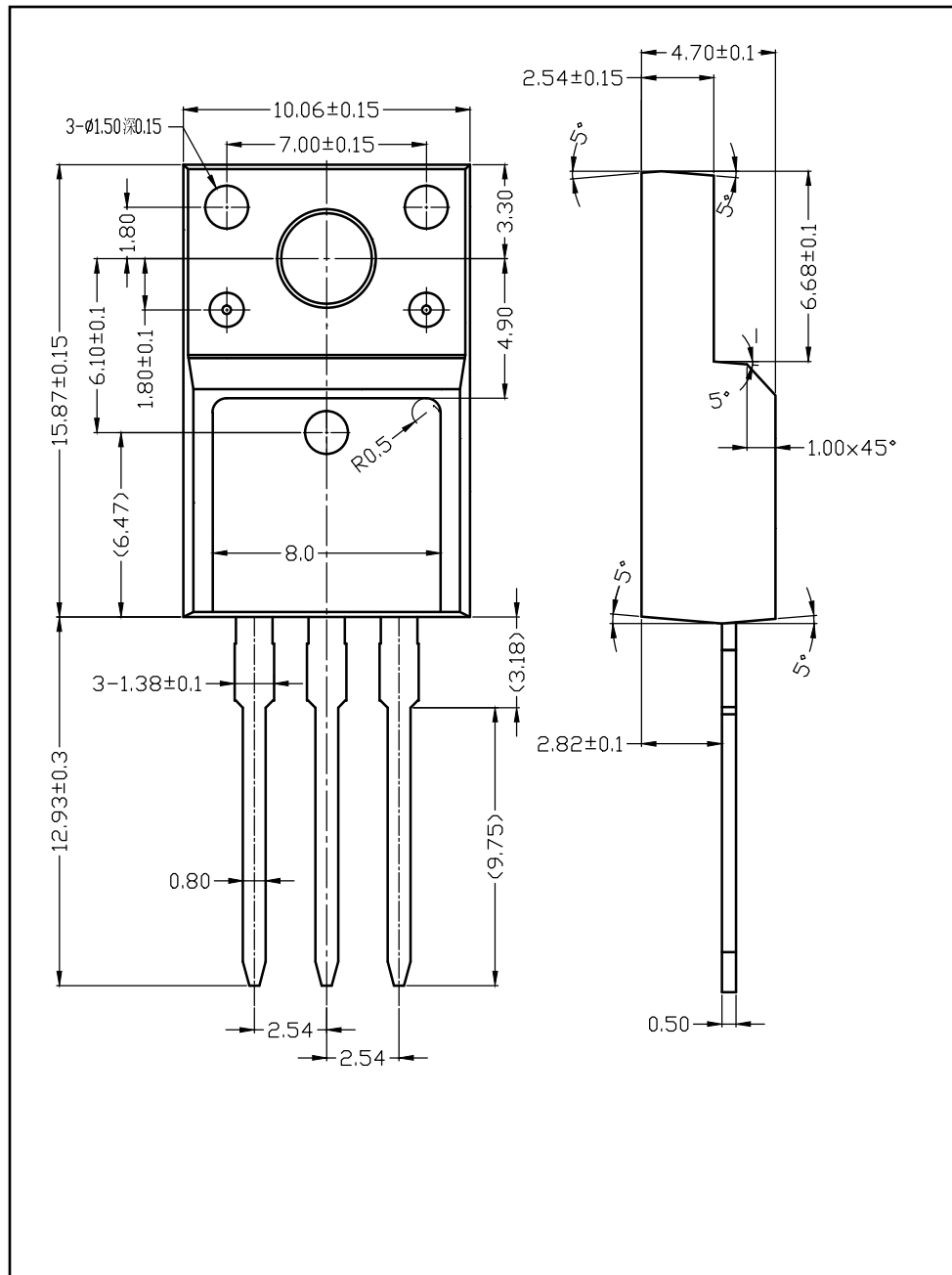


Fig.4 Max Non-Repetitive Surge Current

■ TO-220F-3L PACKAGE OUTLINE DIMENSIONS



Technical drawing of a component showing front and side views with dimensions.

Front View (Left):

- Overall width: 10,200
- Top circular feature diameter: $\phi 3,860$
- Bottom section width: 1,240
- Bottom section height: 1,340

Side View (Right):

- Top flange width: 2,743
- Top flange offset: 1,270
- Reference level: 0,000
- Internal step height: 3,439
- Internal step offset: 3,550
- Internal step width: 4,540
- Internal step offset: 3,836
- Internal step radius: ϕ
- Internal step height: 12,123
- Internal step offset: 12,350
- Internal step width: 12,180
- Internal step offset: 12,180
- Internal step radius: ϕ
- Internal step height: 2,600
- Internal step offset: 25,757
- Internal step width: 0,381

■ TO-263-2L PACKAGE OUTLINE DIMENSIONS

