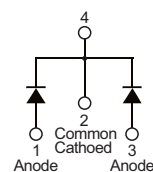


## ■ PRODUCT CHARACTERISTICS

VR(@IC=0.5mA)	100V
VF(Typ@IF=15A)	0.82V
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\*



## ■ ORDER INFORMATION

Order codes		Package	Packing
Halogen-Free	Halogen		
N/A	MOT30100C	TO-251	70 pieces/Tube
N/A	MOT30100D	TO-252	2500 pieces/reel

## ■ MAIMUM RATINGS(Each diode leg)

Parameter	Symol	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
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	$B_V$	$I_C=0.5mA$ $T_J=25^{\circ}C$	—	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	

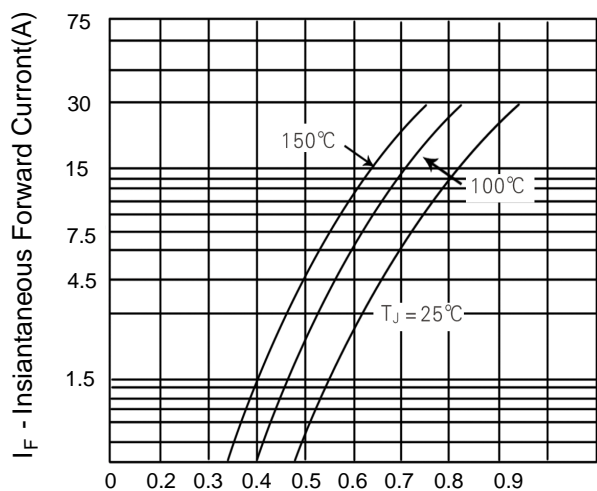


Figure 1. Typical Forward Voltage Per Diode

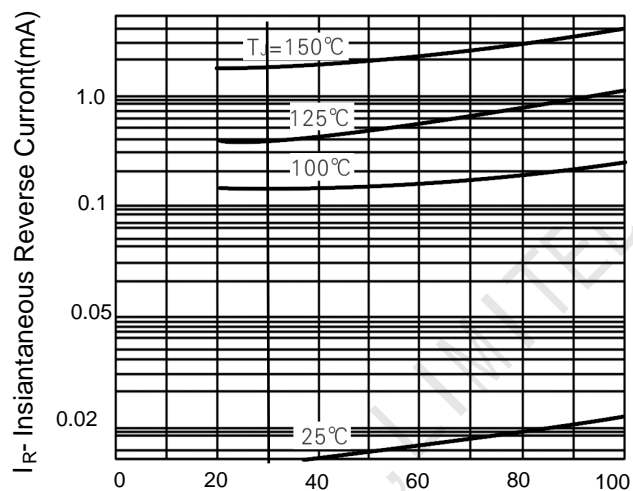


Figure 2. Typical Reverse Current Per Diode

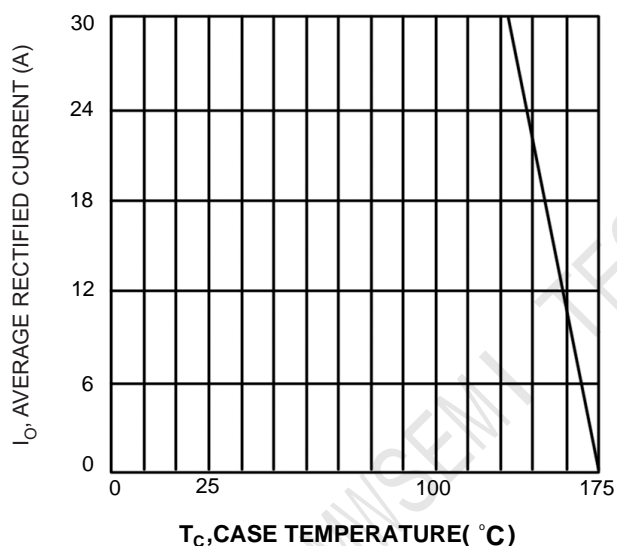


Fig.3 Forward Current Derating Curve

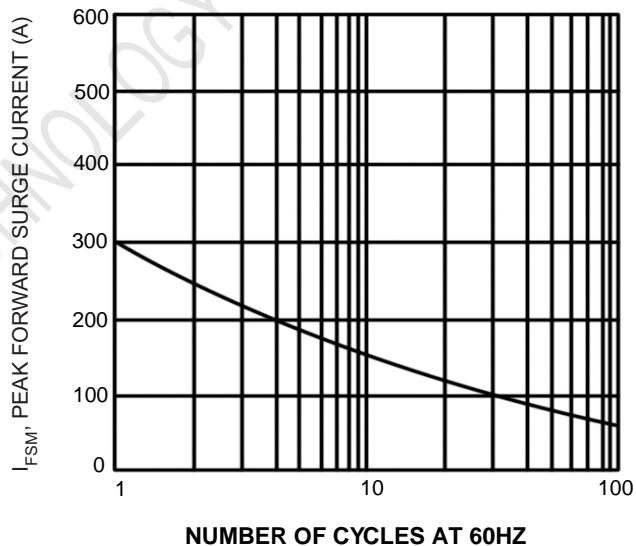
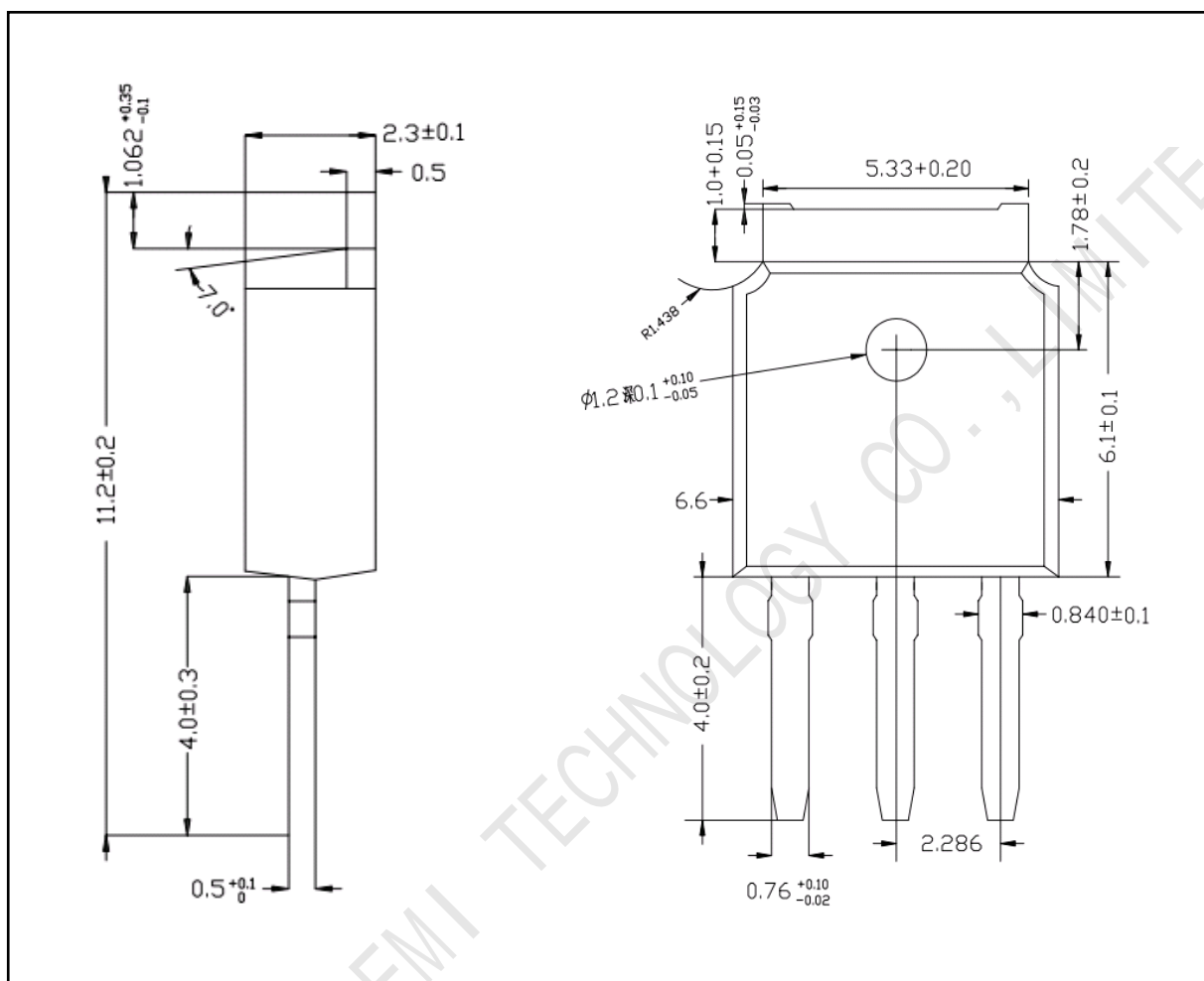
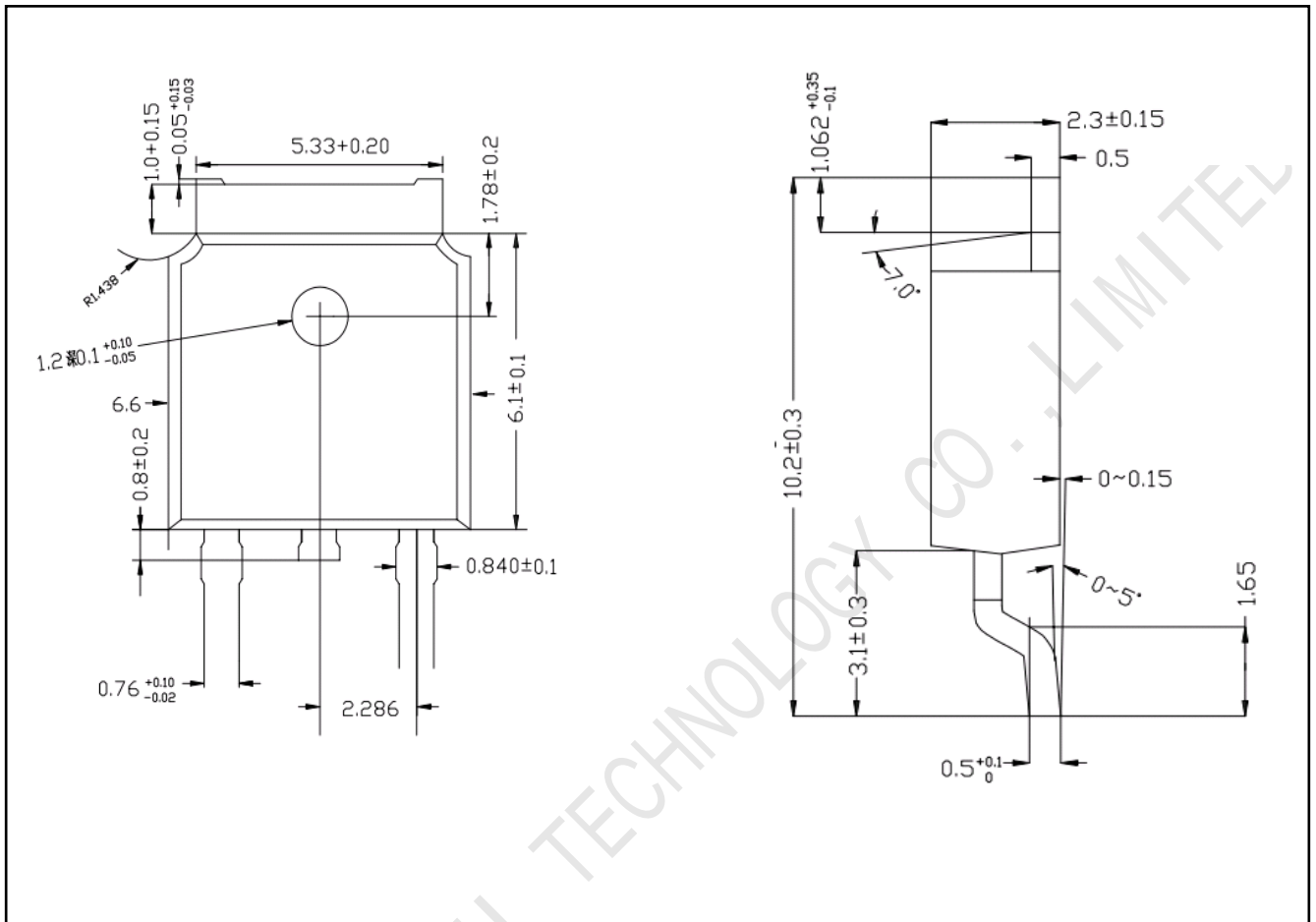


Fig.4 Max Non-Repetitive Surge Current

### ■ TO-251-3L PACKAGE OUTLINE DIMENSIONS



■ TO-252-2L PACKAGE OUTLINE DIMENSIONS



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