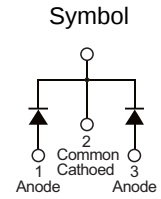


PRODUCT CHARACTERISTICS

VR(@IC=0.5mA)	100V
VF(Typ@IF=10A)	0.78V
IR(@VR=100V)	50uA
ID	20A

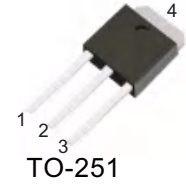
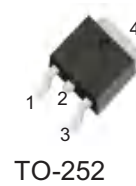


MECHANICAL CHARACTERISTICS

- * Case: epoxy,molded
- * Finish:all external surfaces corrosion resistant and terminal
- * Leads are readily solderable
- * Leads 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 package are available



ORDER INFORMATION

Order codes		Package	Packing
Halogen-free	Halogen		
N/A	MOT20100C	TO-251	70pieces/Tube
N/A	MOT20100D	TO-252	2500pieces/Reel

MAXIMUM RATINGS (Each diode leg)

Parameter	Symbol	Value	Unit
Peak repetitive reverse voltage	V_{RRM}	100	V
Average rectified output current	Total	20	A
	Per leg	10	A
Non-repetitive peak forward surge current 8.3ms single half sine-wave superimposed on reate load	I_{FSM}	200	A
Operating and storage temperature range	T_J, T_{STG}	-55 to + 175	°C

ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Peak repetitive reverse voltage	B_V	$I_C=0.5mA, T_J=25^{\circ}C$	100	-	-	V
Forward voltage drop	V_F	$I_F=10A, T_J=25^{\circ}C$	-	0.78	0.83	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	

■ TYPICAL CHARACTERISTICS

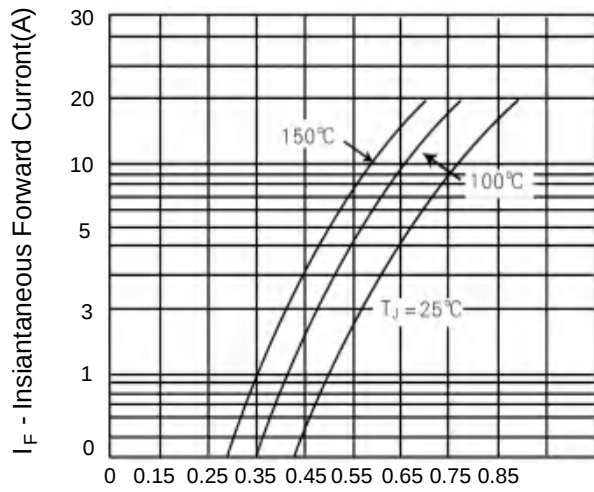


Figure 1. Typical Forward Voltage Per Diode

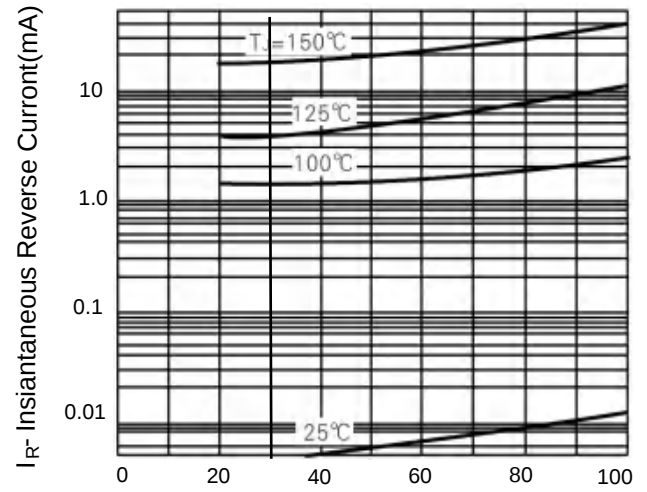


Figure 2. Typical Reverse Current Per Diode

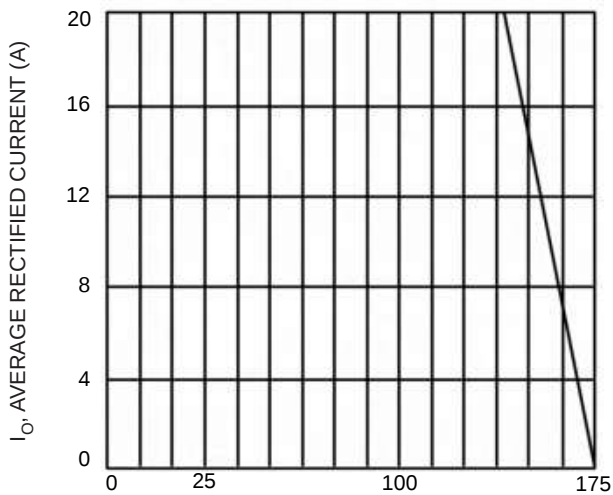


Fig.3 Forward Current Derating Curve

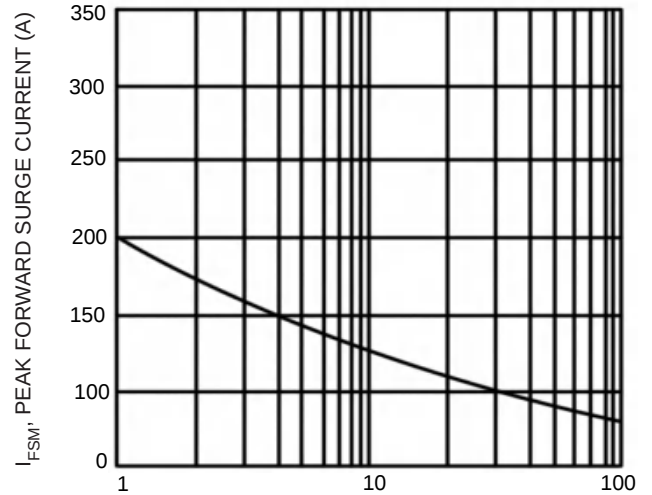
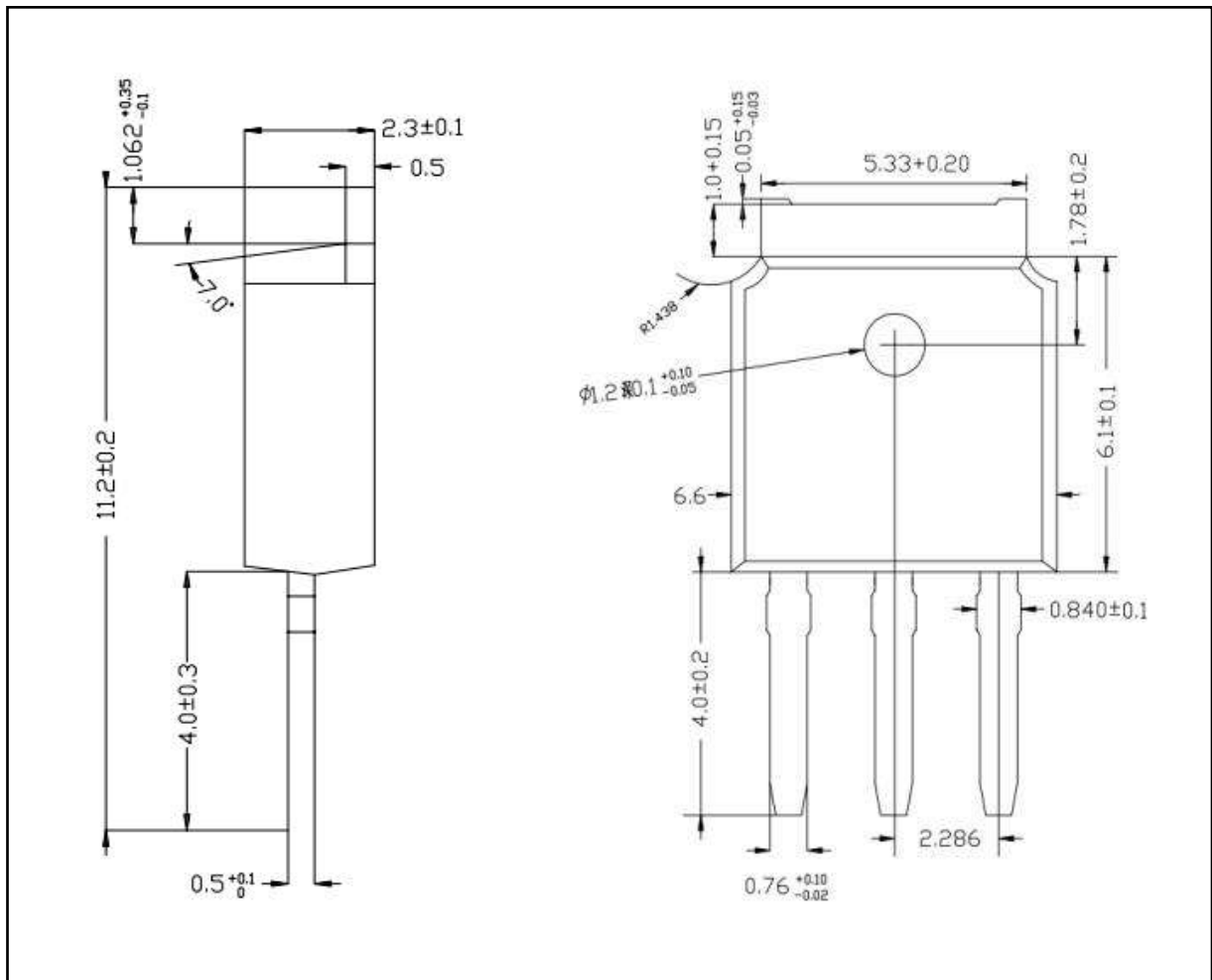


Fig.4 Max Non-Repetitive Surge Current

■ TO-251 PACKAGE OUTLINE DIMENSIONS



Technical drawing of a mechanical part, showing front and side views with dimensions.

Front View Dimensions:

- Top left corner: 1.0 ± 0.15 (width), $0.05^{+0.05}_{-0.03}$ (height)
- Top center: 5.33 ± 0.20 (width)
- Top right corner: 1.78 ± 0.2 (width)
- Right side: 6.1 ± 0.1 (height)
- Bottom right corner: 0.840 ± 0.1 (width)
- Bottom center: 2.286 (width)
- Bottom left corner: $0.76^{+0.10}_{-0.02}$ (width)
- Left side: 6.6 (height), 0.8 ± 0.2 (width)
- Top left corner: $R4.39$ (radius)
- Top left corner: $1.2 \pm 0.1^{+0.10}_{-0.05}$ (width)

Side View Dimensions:

- Top left corner: $1.062^{+0.35}_{-0.1}$ (width)
- Top center: 2.3 ± 0.15 (width)
- Top right corner: 0.5 (width)
- Right side: 1.65 (height)
- Bottom right corner: $0.5^{+0.1}_0$ (width)
- Bottom center: 3.1 ± 0.3 (width)
- Bottom left corner: 10.2 ± 0.3 (width)
- Left side: 0.5 (width)
- Top left corner: 7.0° (angle)
- Top right corner: $0 \sim 0.15$ (width)
- Bottom right corner: $0 \sim 5^\circ$ (angle)