

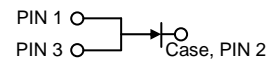
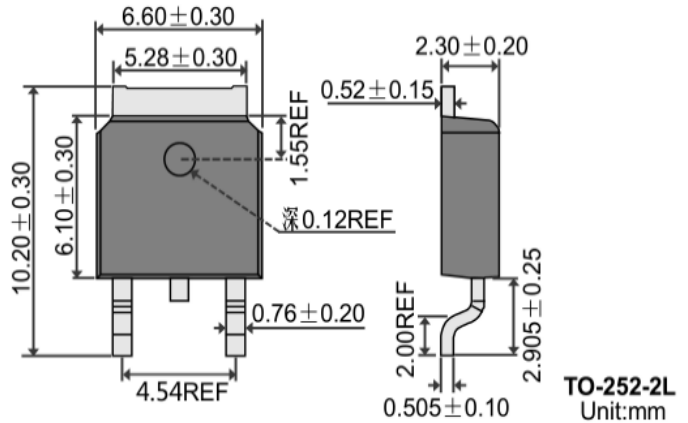
### Features

- Power Schottky Barrier Diode
- Guardring for Overvoltage Protection
- Low Power loss, High Efficiency
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-O

### Mechanical Data

- Case: DPAK/TO-252, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Weight: 0.3 grams (approx.)
- Marking: Device Code, See Page 3
- Mounting Position: Any
- **Lead Free: For RoHS / Lead Free Version**

### DPAK/TO-252



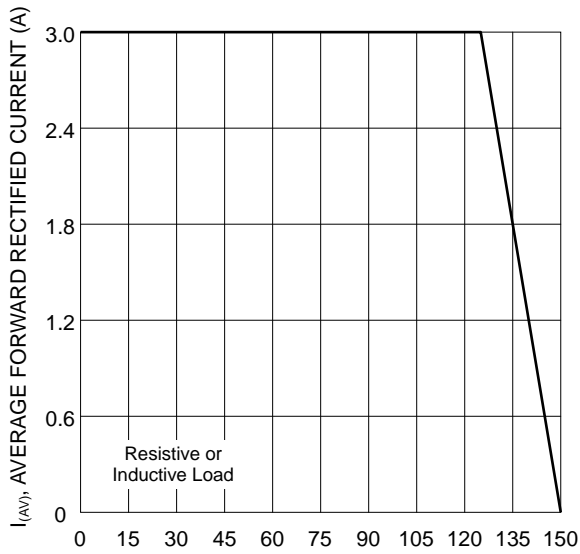
### TYPICAL APPLICATIONS

- For use in low voltage, high frequency inverters mode power supplies, freewheeling diode, and polarity protection applicatio

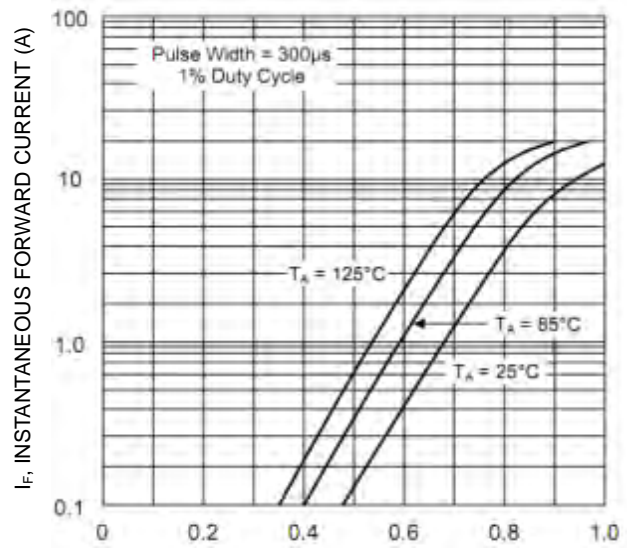
### Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

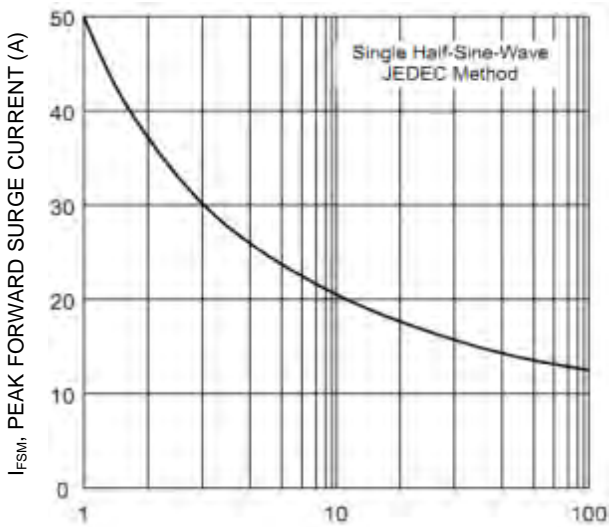
Characteristic	Symbol	MBRD3150S	MBRD3200S	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	150	200	V
Maximum RMS Voltage	$V_{RMS}$	105	140	V
Maximum DC Blocking Voltage	$V_{DC}$	150	200	V
Maximum Average Forward Current Total Device Per Diode	$I_{F(AV)}$	3 3		A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	$I_{FSM}$	50		A
Maximum Forward Voltage at 3A per leg	$V_F$	0.85		V
Maximum DC Reverse Current at Rated DC Blocking Voltag	$I_R$	0.05 10		mA
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	60		$^\circ\text{C}/\text{W}$
Typical Thermal Resistance Junction to Case	$R_{\theta JC}$	5		$^\circ\text{C}/\text{W}$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150		$^\circ\text{C}$



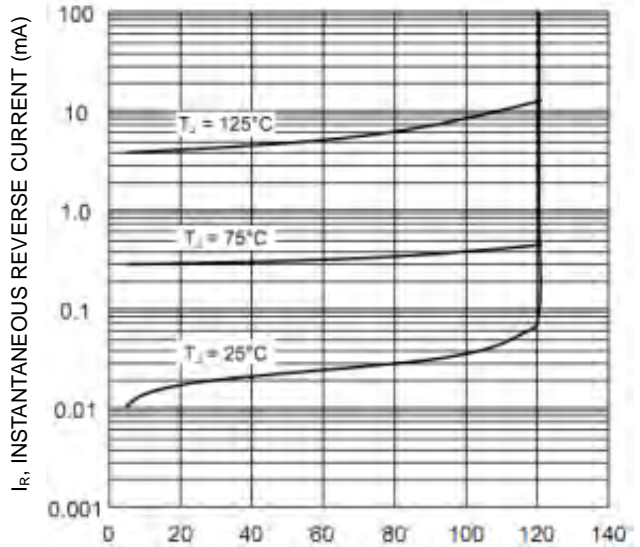
$T_C$ , CASE TEMPERATURE (°C)  
Fig. 1 Forward Current Derating Curve



$V_F$ , INSTANTANEOUS FORWARD VOLTAGE (V)  
Fig. 2 Typical Forward Characteristics

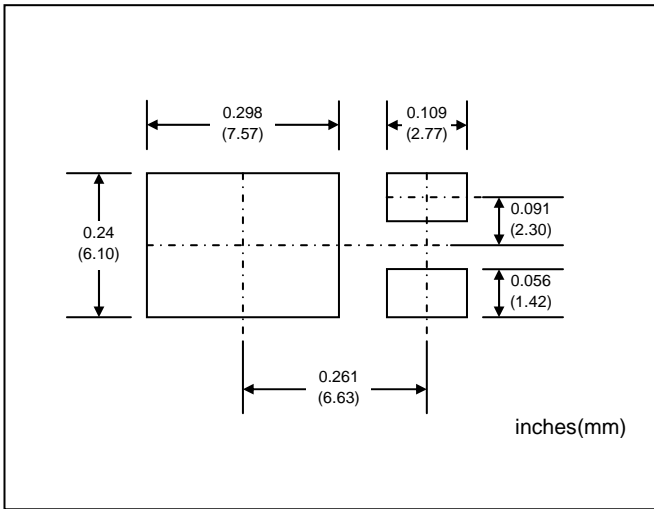


NUMBER OF CYCLES AT 60Hz  
Fig. 3 Forward Surge Current Derating Curve



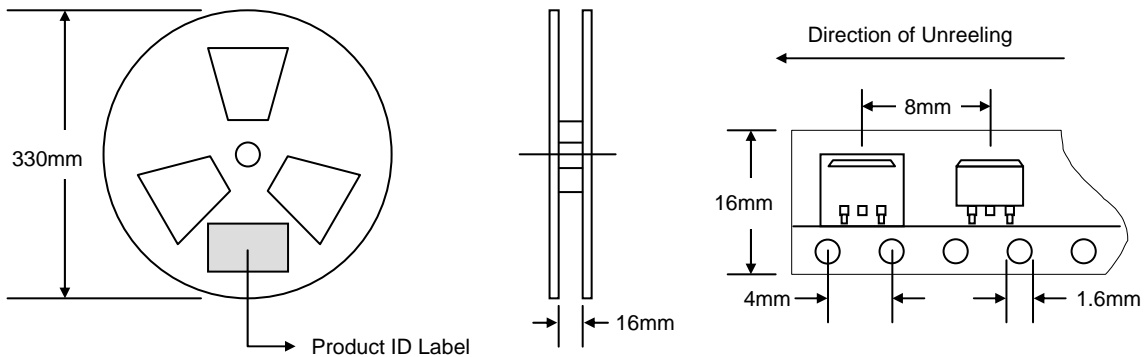
PERCENT OF RATED PEAK REVERSE VOLTAGE (%)  
Fig. 4 Typical Reverse Characteristics

## RECOMMENDED FOOTPRINT



## PACKAGING INFORMATION

### TAPE & REEL



Reel Diameter (mm)	Quantity (PCS)	Inner Box Size L x W x H (mm)	Quantity (PCS)
330	2,500	340 x 337 x 45	5,000