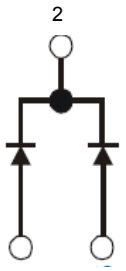
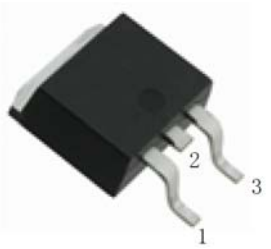
MBRD1015CTR

Surface Mount Schottky Barrier Rectifier
Reverse Voltage - 150 V
Forward Current - 10 A





TO-252 Plastic Package
Pin1,3: Anode Pin 2: Cathode

Features

- Center tap configuration
- Low forward voltage drop
- High frequency operation

Maximum Ratings and Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified. Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter		Symbols	Value	Unit
		Marking	MBRD1015CTR	-
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	150	V
Maximum Average Forward Rectified Current T_C = 105℃		$I_{F(AV)}$	10	A
Peak Forward Surge Current 8.3 ms Half Sine-wave Superimposed on Rated Load (JEDEC method)		I_{FSM}	100	A
Maximum Instantaneous Forward Voltage at I_F = 5 A	T_J = 25℃ T_J = 125℃ T_J = 150℃	V_F	0.95 0.8 0.75	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_J = 25℃ T_J = 125℃ T_J = 150℃	I_R	1 7 30	mA
Typical Junction Capacitance [1]		C_j	200	pF
Typical Thermal Resistance from junction to Case		$R_{\theta JC}$	4.5	℃/W
Operating Junction Temperature Range		T_j	- 55 to + 150	℃
Storage Temperature Range		T_{stg}	- 55 to + 150	℃

[1] at V_R = 5 V, f = 1 MHz.

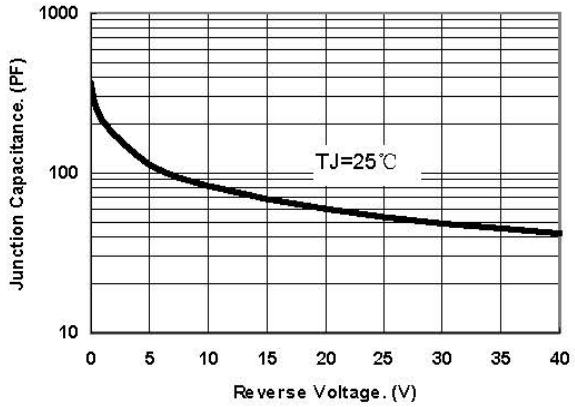


Fig.1-Typical Junction Capacitance

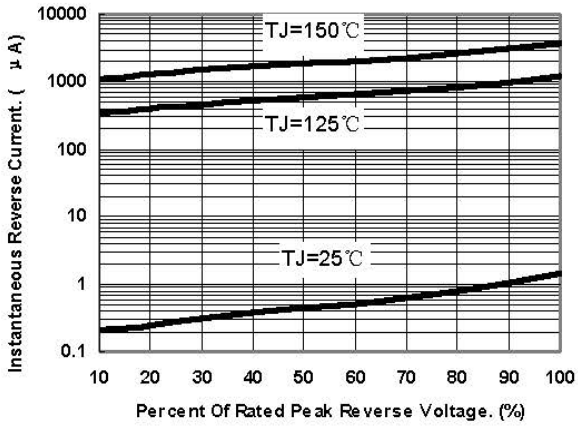


Fig.2-Typical Reverse Characteristics

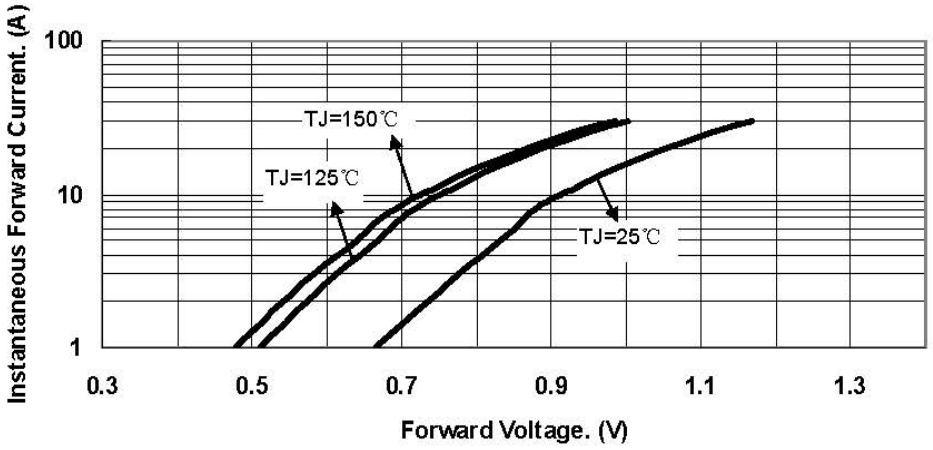


Fig.3-Typical Instantaneous Forward Voltage Characteristics

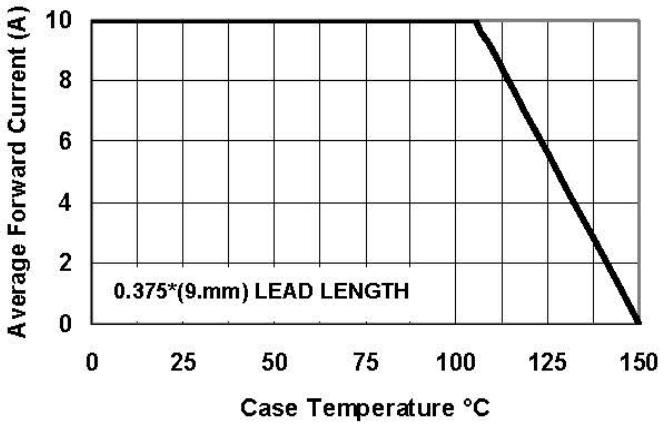
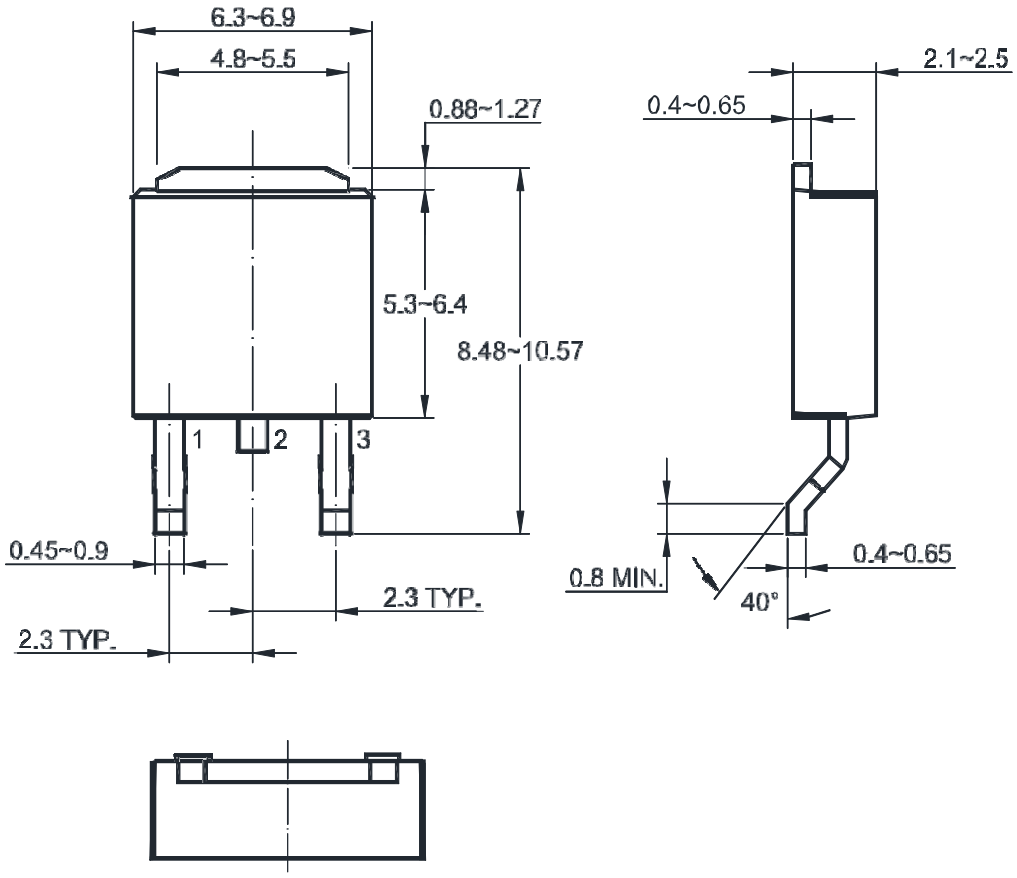


Fig.4-Forward Current Derating Curve

Package Outline Dimensions (Units: mm) TO-252



Recommended Soldering Footprint