Certificate Number: Q10561

Certificate Number: E17276

MBRF2545CT

Schottky Barrier Rectifier

PRV : 45 Volts
Io : 25 Ampere

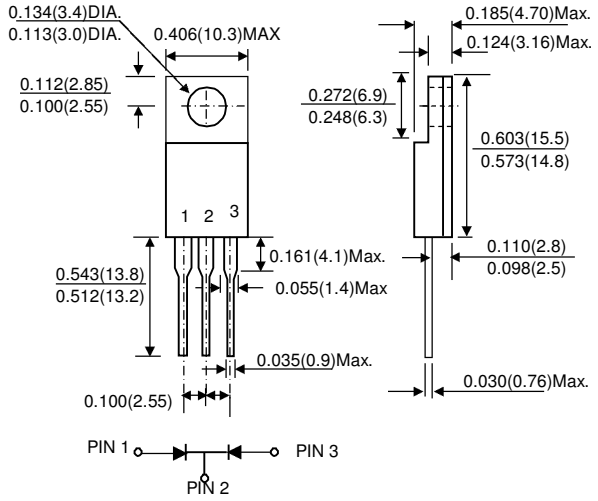
FEATURES :

* Highly Stable Oxide Passivated Junction
* Very Low Forward Voltage Drop
* Matched Dual Die Construction
* High Junction Temperature Capability
* Excellent Ability to Withstand Reverse Avalanche Energy Transients
* Guardring for Stress Protection
* Pb / RoHS Free

MECHANICAL DATA :

* Case : Epoxy, Molded
* Lead Temperature for Soldering Purposes: 260 ℃ Max. for 10 Seconds
* Polarity: As marked
* Mounting Position: Any
* Weight : 2.24 grams (Approximately)

ITO-220AB



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (Ta =25℃ unless otherwise specified.)

RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	45	V
Maximum Working peak reverse voltage	V_{RWM}	45	V
Maximum DC Blocking Voltage	V_{DC}	45	V
Maximum Average Forward Current, T_C = 125 ℃	$I_{F(AV)}$	25 (Tatal Device) 12.5 (Per Leg)	A
Peak repetitive forward current at T_C = 125 ℃ (rated V_R, square wave, 20 KHz)	I_{FRM}	25	A
Maximum Non-repetitive Peak Forward Surge Current (Suge applied at rated load conditions halfwave, single phase, 60 Hz)	I_{FSM}	150	A
Maximum Instantaneous Forward Voltage (Note 1) (I_F = 12.5 A, Tc = 25 ℃) (I_F = 12.5 A, Tc = 125 ℃)	V_F	 0.7 0.62	V
Maximum Instantaneous Reverse Current (Note 1) (Rated DC Voltage, Tc = 25 ℃) (Rated DC Voltage, Tc = 125 ℃)	 I_R $I_{R(H)}$	 0.2 40	mA
Voltage Rate of Change (Rated V_R)	dv/dt	10000	V/μs
Maximum Thermal Resistance, Junction to Case	$R_{\theta JC}$	3.5	°C/W
Maximum Lead Temperature for Soldering Purposes: 1/8" from Case for 5 Seconds	T_L	260	°C
Operating Junction and Storage Temperature	T_J, T_{STG}	- 65 to + 150	°C

Note : (1) Pulse Test : Pulse Width = 300 μs, Duty Cycle ≤ 2.0 %

RATING AND CHARACTERISTIC CURVES (MBRF2545CT)

FIG.1 - TYPICAL FORWARD VOLTAGE, PER LEG

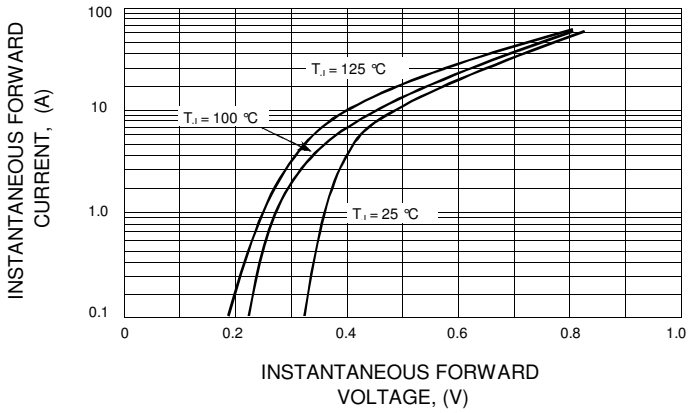


FIG.2 - TYPICAL REVERSE CURRENT, PER LEG