

# MBRF2545CT

**PRV : 45 Volts**  
**Io : 25 Ampere**

### FEATURES :

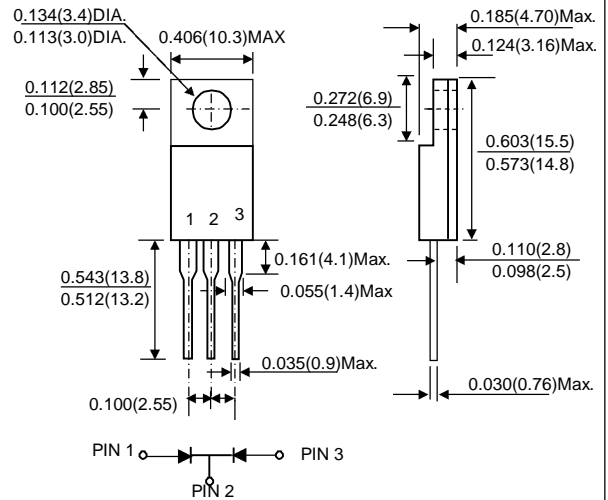
- \* Highly Stable Oxide Passivated Junction
- \* Very Low Forward Voltage Drop
- \* Matched Dual Die Construction
- \* High Junction Temperature Capability
- \* Excellent Ability to Withstand Reverse Avalanche Energy Transients
- \* Guardring for Stress Protection
- \* **Pb / RoHS Free**

### MECHANICAL DATA :

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

# Schottky Barrier Rectifier

## ITO-220AB



**Dimensions in inches and ( millimeters )**

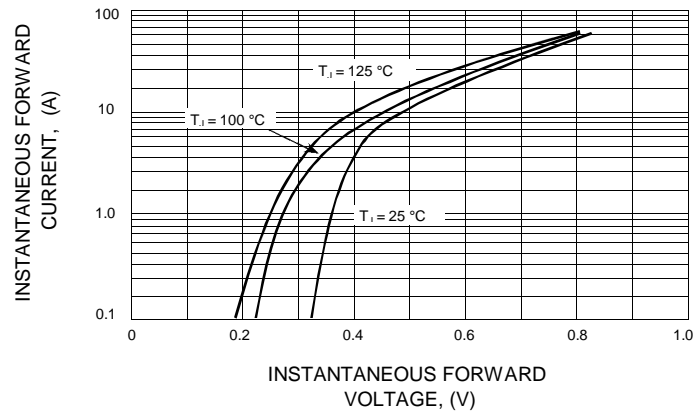
### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (Ta = 25°C unless otherwise specified.)

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, $T_C = 125^\circ C$	$I_{F(AV)}$	25 (Total Device)	A
		12.5 (Per Leg)	
Peak repetitive forward current at $T_C = 125^\circ C$ (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) ( $I_F = 12.5 A, T_C = 25^\circ C$ ) ( $I_F = 12.5 A, T_C = 125^\circ C$ )	$V_F$	0.7	V
		0.62	
Maximum Instantaneous Reverse Current (Note 1) ( Rated DC Voltage, $T_C = 25^\circ C$ ) ( Rated DC Voltage, $T_C = 125^\circ C$ )	$I_R$	0.2	mA
	$I_{R(H)}$	40	
Voltage Rate of Change (Rated $V_R$ )	$dv/dt$	10000	V/ $\mu s$
Maximum Thermal Resistance, Junction to Case	$R_{\theta JC}$	3.5	$^\circ C/W$
Maximum Lead Temperature for Soldering Purposes: 1/8" from Case for 5 Seconds	$T_L$	260	$^\circ C$
Operating Junction and Storage Temperature	$T_J, T_{STG}$	- 65 to + 150	$^\circ C$

Note : (1) Pulse Test : Pulse Width = 300  $\mu s$ , Duty Cycle  $\leq 2.0\%$

## RATING AND CHARACTERISTIC CURVES ( MBRF2545CT )

**FIG.1 - TYPICAL FORWARD VOLTAGE, PER LEG**



**FIG.2 - TYPICAL REVERSE CURRENT, PER LEG**

