

MBR3035CT ~ MBR3045CT

DUAL SCHOTTKY BARRIER RECTIFIERS

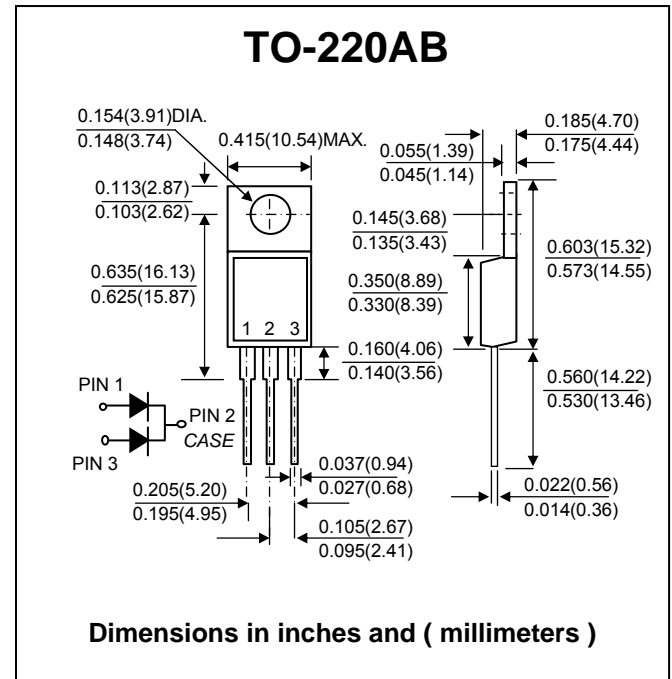
PRV : 35 ~ 45 Volts
Io : 30 Amperes

FEATURES :

- * Guardring for overvoltage protection
- * Lower power losses, high efficiency
- * Low forward voltage drop
- * High forward surge capability
- * High frequency operation
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : JEDEC TO-220AB molded plastic body
- * Terminals: Plated leads, solderable per MIL-STD-750 Method 2026
- * Polarity: As marked
- * Mounting Position: Any
- * Weight : 2.24 grams (Approximately)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ($T_c = 25\text{ }^\circ\text{C}$ unless otherwise noted)

RATINGS	SYMBOL	MBR 3035CT	MBR3045CT	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	35	45	V
Maximum RMS Voltage	V_{RMS}	35	45	V
Maximum DC Blocking Voltage	V_{DC}	35	45	V
Maximum Average Forward Current <i>Total device</i> at $T_c = 130\text{ }^\circ\text{C}$ <i>Per leg</i>	$I_{F(AV)}$	30 15		A
Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load (JEDEC Method) Per leg	I_{FSM}	200		A
Maximum Instantaneous Forward Voltage per leg (Note 1) at $I_F = 20\text{ A}$, $T_c = 125\text{ }^\circ\text{C}$ at $I_F = 30\text{ A}$, $T_c = 25\text{ }^\circ\text{C}$ at $I_F = 30\text{ A}$, $T_c = 125\text{ }^\circ\text{C}$	V_F	0.60 0.76 0.72		V
Maximum Reverse Current at Rated DC $T_c = 25\text{ }^\circ\text{C}$	I_R	1.0		mA
Blocking Voltage per leg (Note 1) $T_c = 125\text{ }^\circ\text{C}$	$I_{R(H)}$	60		mA
Typical Thermal Resistance from Junction to Case Per diode	$R_{\theta JC}$	1.5		$^\circ\text{C/W}$
Operating Temperature Range	T_J	- 65 to + 150		$^\circ\text{C}$
Storage Temperature Range	T_{STG}	- 65 to + 175		$^\circ\text{C}$

Note : (1) Pulse test : 300 μs pluse width, 1% duty cycle.

RATING AND CHARACTERISTIC CURVES (MBR3035CT ~ MBR3045CT)

FIG.1 - FORWARD CURRENT DERATING CURVE

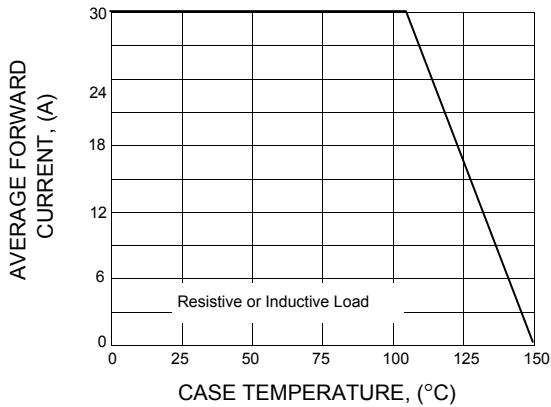


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

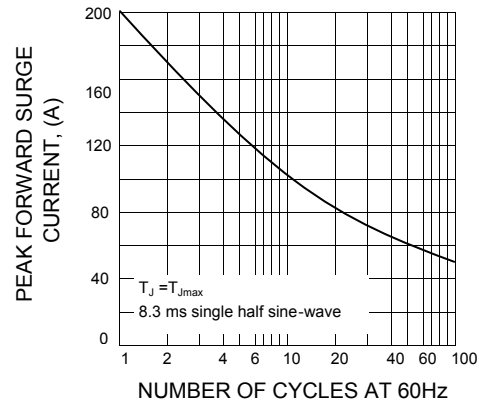


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

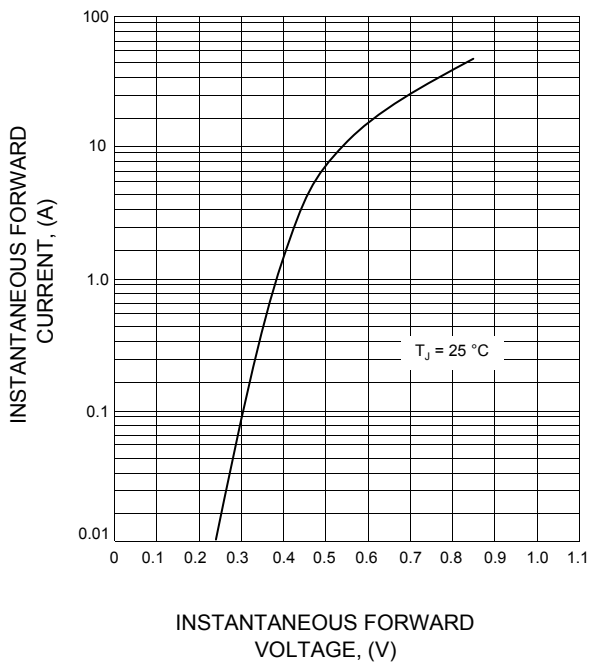


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER LEG

