

MBRB2545CT

PRV : 45 Volts
Io : 30 Amperes

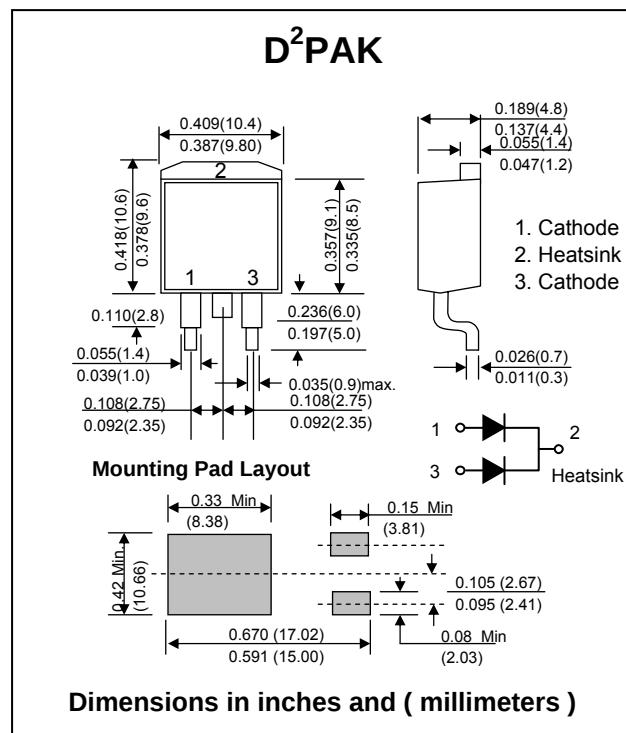
FEATURES :

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

MECHANICAL DATA

- * Case : D²PAK (TO-263AB)
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Surface Mount per J-STD-020C,
Method 208 guaranteed
- * Polarity : As marked
- * Mounting position : Any
- * Weight : 1.7 grams (approximately)

DUAL SCHOTTKY BARRIER RECTIFIERS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_C = 25 °C unless otherwise noted)

RATINGS	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	45	V
Maximum RMS Voltage	V _{RMS}	45	V
Maximum DC Blocking Voltage	V _{DC}	45	V
Maximum Average Forward Current at T _C = 130 °C	I _{F(AV)}	30	A
<i>Total device</i> <i>Per Diode</i>		15	
Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load Per Diode	I _{FSM}	150	A
Maximum Instantaneous Forward Voltage per Diode (Note 1) at I _F = 30 A, T _C = 25 °C	V _F	0.82	V
at I _F = 30 A, T _C = 125 °C		0.73	
Maximum Reverse Current at Rated DC Blocking Voltage per Diode (Note 1)	I _R	0.2	mA
T _C = 25 °C	I _{R(H)}	40	mA
T _C = 125 °C			
Typical Thermal Resistance, Junction to Case Per Diode	R _{θJC}	1.5	°C/W
Operating Temperature Range	T _J	- 65 to + 150	°C
Storage Temperature Range	T _{STG}	- 65 to + 175	°C

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

RATING AND CHARACTERISTIC CURVES (MBRB2545CT)

FIG.1 - FORWARD CURRENT DERATING CURVE

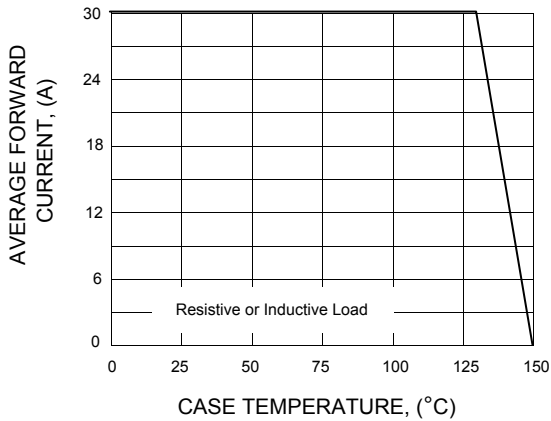


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER DIODE

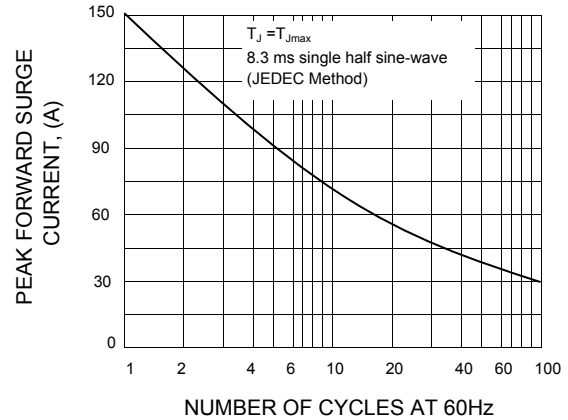


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER DIODE

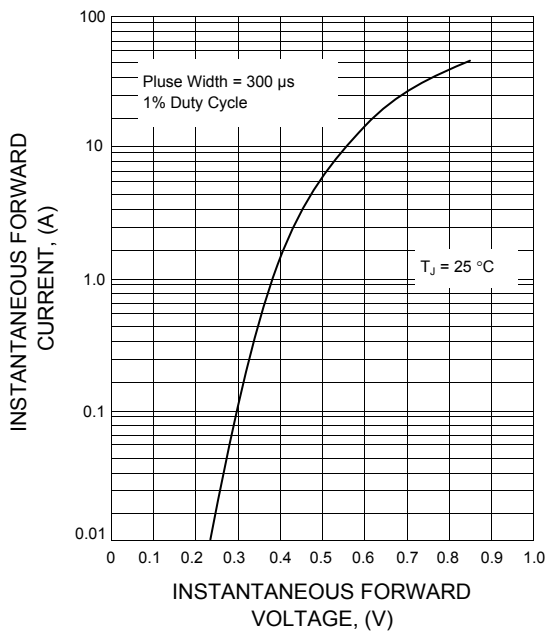


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER DIODE

