



ELECTRICAL CHARACTERISTICS (T <sub>C</sub> = 25 °C unless otherwise noted)						
PARAMETER	SYMBOL	TEST CONDITIONS		MBR2045CT	MBR2060CT	UNIT
Maximum instantaneous forward voltage per diode	V <sub>F</sub> <sup>(1)</sup>	I <sub>F</sub> = 10 A	T <sub>C</sub> = 25 °C	0.65	0.80	V
		I <sub>F</sub> = 10 A	T <sub>C</sub> = 125 °C	0.57	0.70	
		I <sub>F</sub> = 20 A	T <sub>C</sub> = 25 °C	0.84	0.95	
		I <sub>F</sub> = 20 A	T <sub>C</sub> = 125 °C	0.72	0.85	
Maximum reverse current at DC blocking voltage per diode	I <sub>R</sub> <sup>(2)</sup>	Rated V <sub>R</sub>	T <sub>C</sub> = 25 °C	0.1	0.15	mA
			T <sub>C</sub> = 125 °C	15	150	

**Notes**

(1) Pulse test: 300  $\mu\text{s}$  pulse width, 1 % duty cycle

(2) Pulse test: pulse width  $\leq 40\text{ ms}$

<b>THERMAL CHARACTERISTICS</b> ( $T_C = 25\text{ }^{\circ}\text{C}$ unless otherwise noted)			
PARAMETER	SYMBOL	MBR	UNIT
Typical resistance from junction to case per diode	$R_{\theta JC}$	2.0	$^{\circ}\text{C/W}$

<b>ORDERING INFORMATION</b> (Example)					
PACKAGE	PREFERRED P/N	UNIT WEIGHT (g)	PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
TO-220AB	MBR2045CT-E3/4W	1.85	4W	50/tube	Tube



## RATINGS AND CHARACTERISTICS CURVES ( $T_C = 25\text{ }^{\circ}\text{C}$ unless otherwise noted)

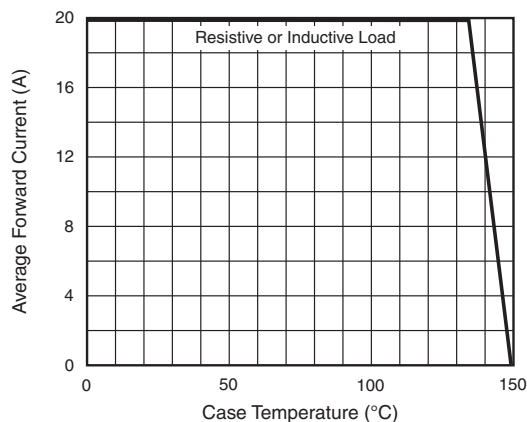


Fig. 1 - Forward Derating Curve (Total)

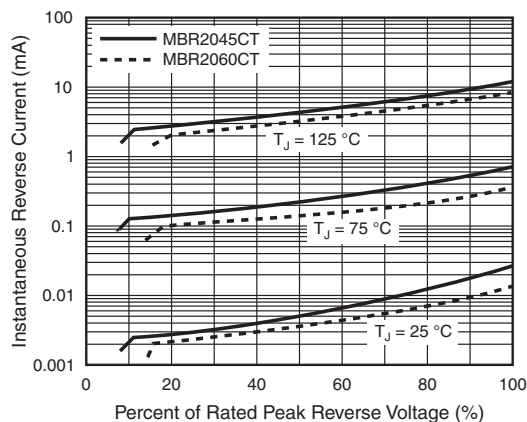


Fig. 4 - Typical Reverse Characteristics Per Diode

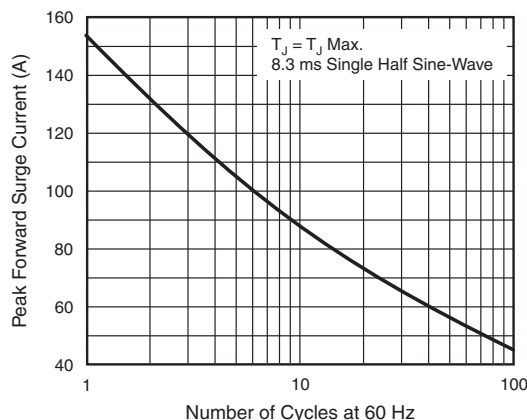


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Diode

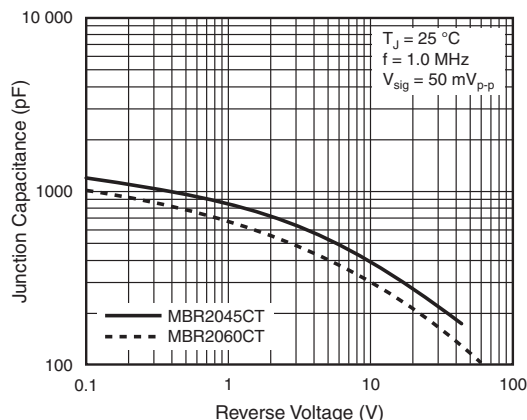


Fig. 5 - Typical Junction Capacitance Per Diode

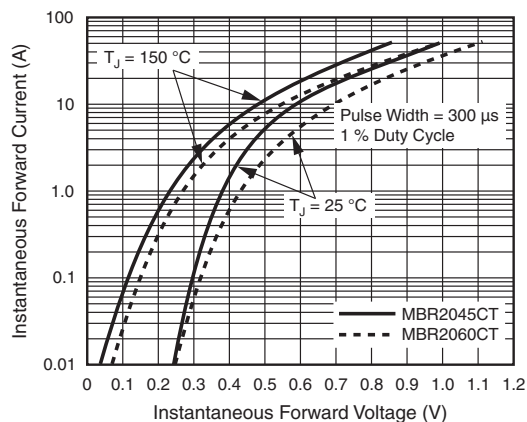


Fig. 3 - Typical Instantaneous Forward Characteristics Per Diode

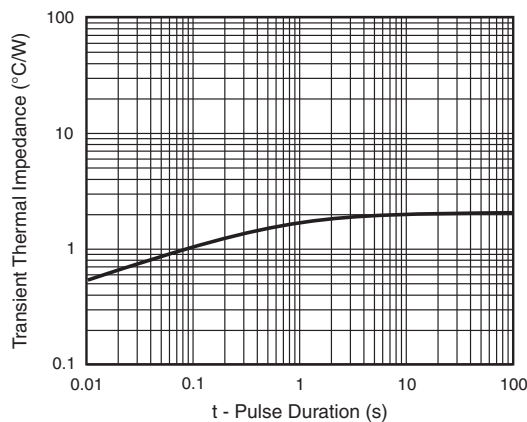
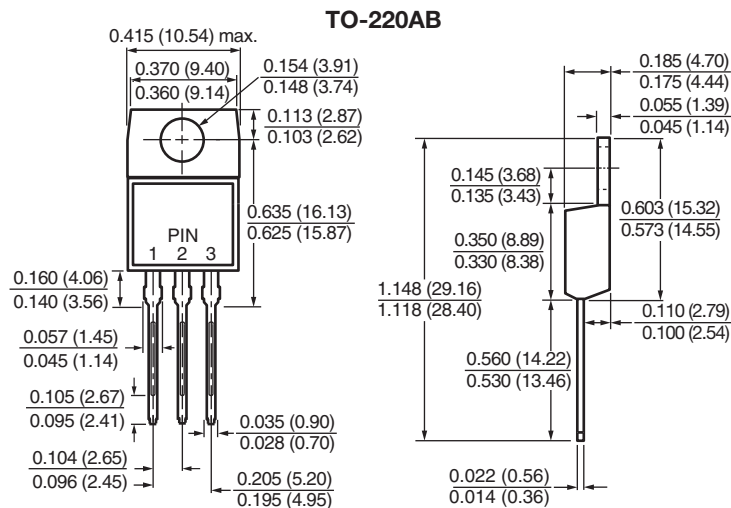


Fig. 6 - Typical Transient Thermal Impedance Per Diode



PACKAGE OUTLINE DIMENSIONS in inches (millimeters)





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