



ELECTRICAL CHARACTERISTICS ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)							
PARAMETER	SYMBOL	TEST CONDITIONS	MBR4035PT	MBR4045PT	MBR4050PT	MBR4060PT	UNIT
Maximum instantaneous forward voltage per diode	$V_F^{(1)}$	$I_F = 20\text{ A}$ $T_J = 25\text{ }^\circ\text{C}$	0.70		0.72		V
		$I_F = 20\text{ A}$ $T_J = 125\text{ }^\circ\text{C}$	0.60		0.62		
		$I_F = 40\text{ A}$ $T_J = 25\text{ }^\circ\text{C}$	0.80		-		
		$I_F = 40\text{ A}$ $T_J = 125\text{ }^\circ\text{C}$	0.75		-		
Maximum instantaneous reverse current at rated DC blocking voltage per diode	$I_R^{(1)}$	$T_J = 25\text{ }^\circ\text{C}$		1.0			mA
		$T_J = 125\text{ }^\circ\text{C}$		100			

Note

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

THERMAL CHARACTERISTICS ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)						
PARAMETER	SYMBOL	MBR4035PT	MBR4045PT	MBR4050PT	MBR4060PT	UNIT
Thermal resistance, junction to case per diode	$R_{\theta JC}$		1.2			$^\circ\text{C/W}$

ORDERING INFORMATION (Example)					
PACKAGE	PREFERRED P/N	UNIT WEIGHT (g)	PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
TO-247AD	MBR4045PT-E3/45	6.13	45	30/tube	Tube

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

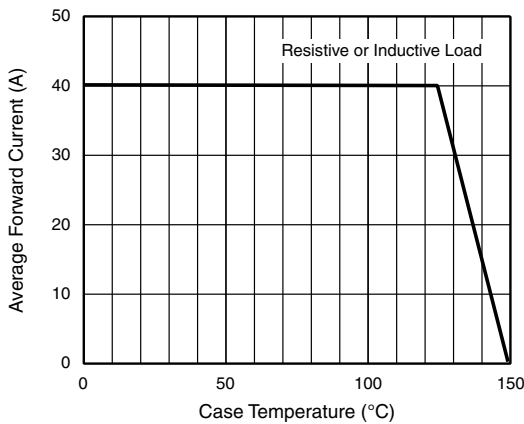


Fig. 1 - Forward Current Derating Curve

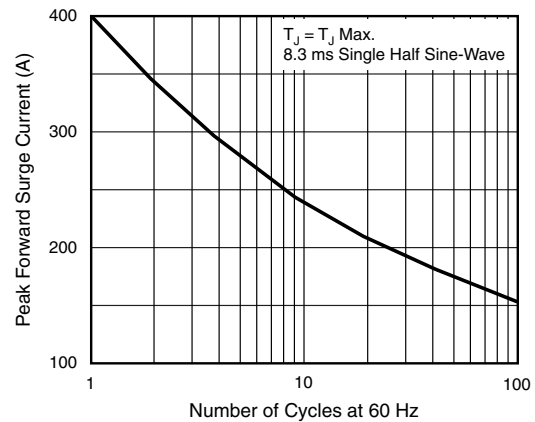


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Diode

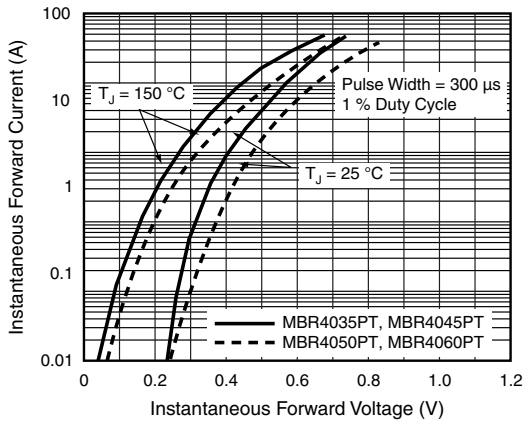


Fig. 3 - Typical Instantaneous Forward Characteristics Per Diode

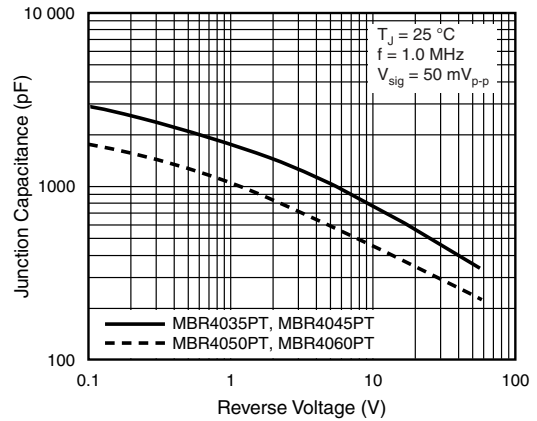


Fig. 5 - Typical Junction Capacitance Per Diode

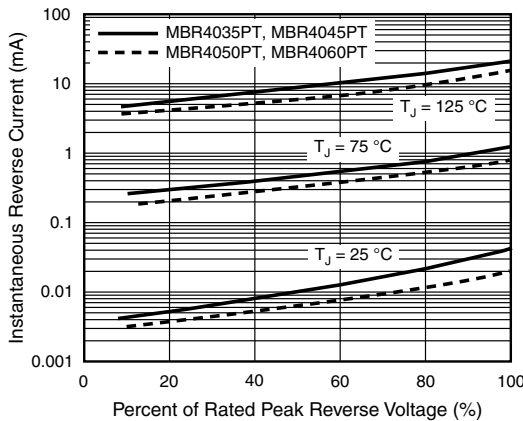


Fig. 4 - Typical Reverse Characteristics Per Diode

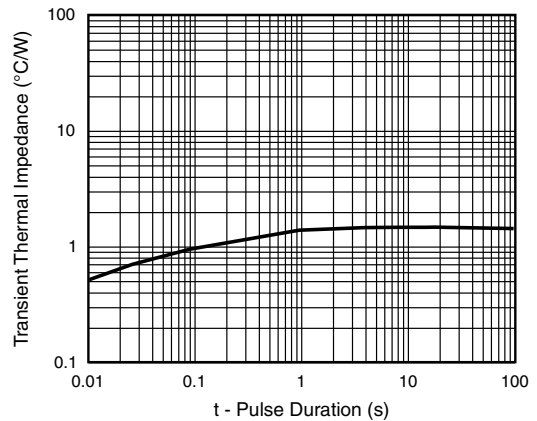
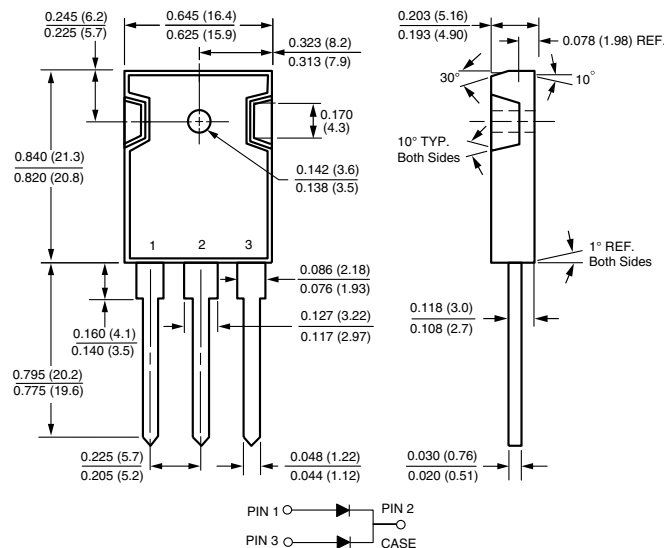


Fig. 6 - Typical Transient Thermal Impedance Per Diode

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

TO-3P (TO-247AD)





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