

**ELECTRICAL CHARACTERISTICS** ($T_C = 25\text{ }^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS		VALUE	UNIT
Maximum instantaneous forward voltage per diode	$V_F^{(1)}$	$I_F = 15\text{ A}$	$T_C = 25\text{ }^{\circ}\text{C}$	0.90	V
		$I_F = 15\text{ A}$	$T_C = 125\text{ }^{\circ}\text{C}$	0.75	
		$I_F = 30\text{ A}$	$T_C = 25\text{ }^{\circ}\text{C}$	0.99	
		$I_F = 30\text{ A}$	$T_C = 125\text{ }^{\circ}\text{C}$	0.86	
Maximum reverse current per diode at working peak reverse voltage	$I_R^{(1)}$			$T_J = 25\text{ }^{\circ}\text{C}$	μA
				$T_J = 125\text{ }^{\circ}\text{C}$	mA

Note

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

THERMAL CHARACTERISTICS ($T_C = 25\text{ }^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	MBR	MBRF	MBRB	UNIT
Typical thermal resistance per diode	$R_{\theta JC}$	1.7	4.0	1.7	$^{\circ}\text{C/W}$

ORDERING INFORMATION (Example)

PACKAGE	PREFERRED P/N	UNIT WEIGHT (g)	PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
TO-220AB	MBR30H150CT-E3/45	2.06	45	50/tube	Tube
ITO-220AB	MBRF30H150CT-E3/45	2.20	45	50/tube	Tube
TO-262AA	SB30H150CT-1E3/45	1.58	45	50/tube	Tube

RATINGS AND CHARACTERISTICS CURVES

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

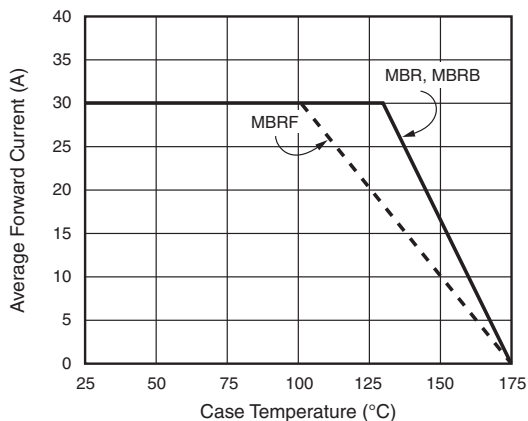


Fig. 1 - Forward Current Derating Curve (Total)

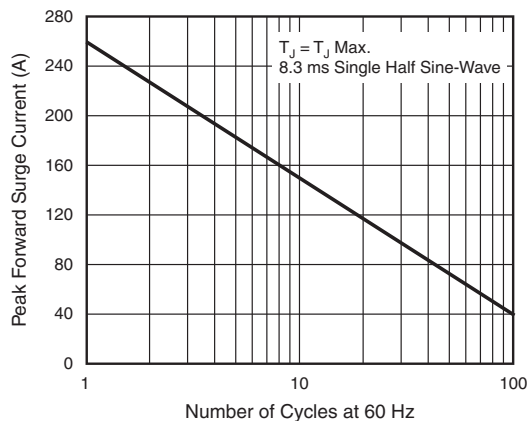


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Diode

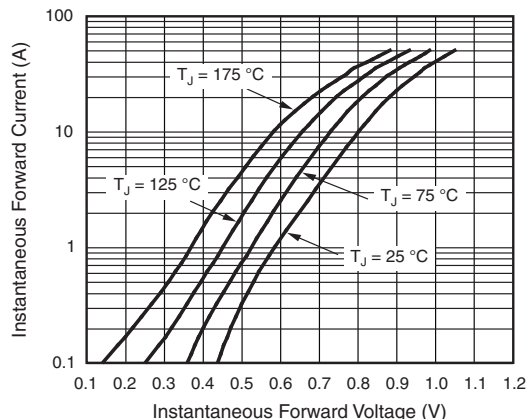


Fig. 3 - Typical Instantaneous Forward Characteristics Per Diode

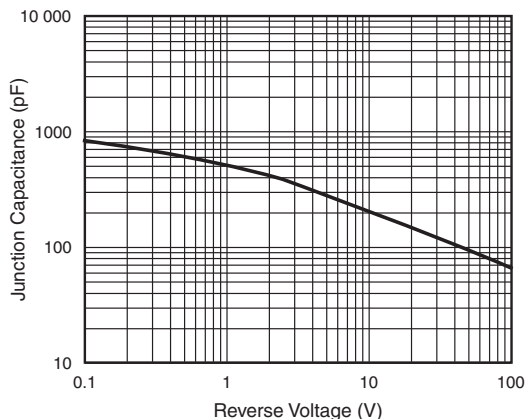


Fig. 5 - Typical Junction Capacitance Per Diode

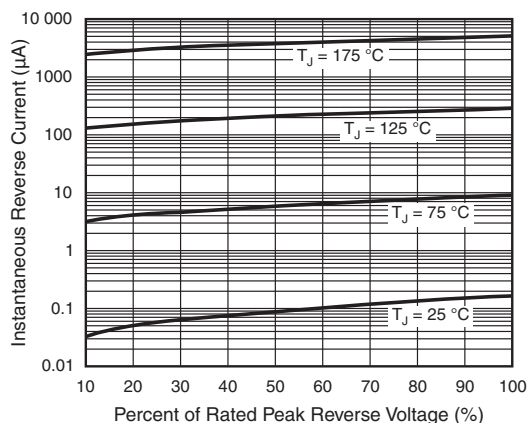


Fig. 4 - Typical Reverse Characteristics Per Diode

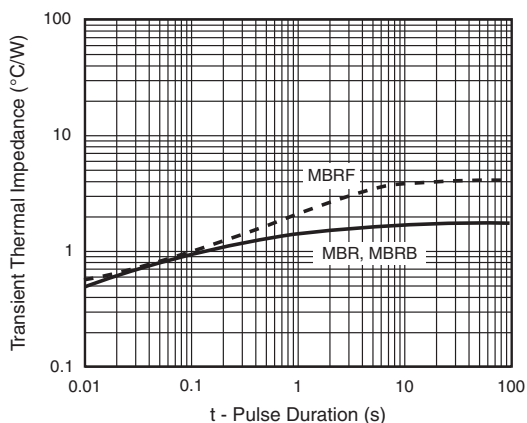
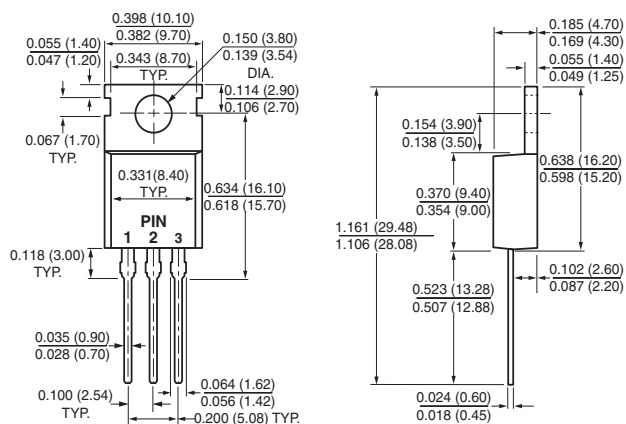


Fig. 6 - Typical Transient Thermal Impedance Per Diode

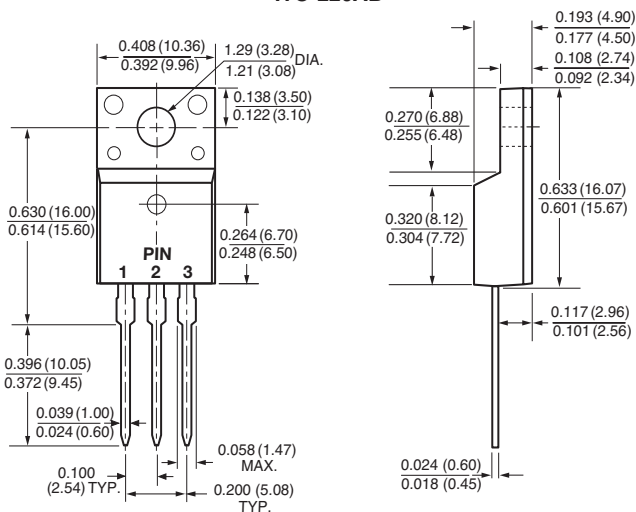


PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

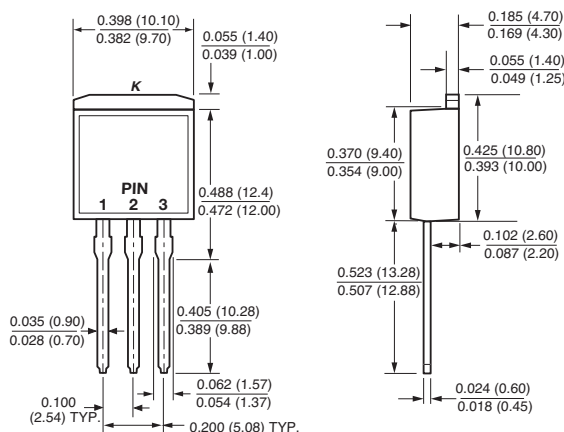
TO-220AB



ITO-220AB



TO-262AA





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