



ELECTRICAL CHARACTERISTICS ($T_C = 25\text{ }^\circ\text{C}$ unless otherwise noted)								
PARAMETER	SYMBOL	TEST CONDITIONS		MBR15H45CT		MBR15H60CT		UNIT
				TYP.	MAX.	TYP.	MAX.	
Maximum instantaneous forward voltage per diode	V_F ⁽¹⁾	$I_F = 7.5\text{ A}$	$T_J = 25\text{ }^\circ\text{C}$	-	0.63	-	0.73	V
		$I_F = 7.5\text{ A}$	$T_J = 125\text{ }^\circ\text{C}$	0.50	0.55	0.58	0.61	
		$I_F = 15\text{ A}$	$T_J = 25\text{ }^\circ\text{C}$	-	0.75	-	0.87	
		$I_F = 15\text{ A}$	$T_J = 125\text{ }^\circ\text{C}$	0.61	0.66	0.68	0.72	
Maximum reverse current per diode	I_R ⁽²⁾	Rated V_R	$T_J = 25\text{ }^\circ\text{C}$	-	50	-	50	μA
			$T_J = 125\text{ }^\circ\text{C}$	3.0	10	2.0	10	mA

Notes(1) Pulse test: 300 μs pulse width, 1 % duty cycle(2) Pulse test: pulse width $\leq 40\text{ ms}$

THERMAL CHARACTERISTICS ($T_C = 25\text{ }^\circ\text{C}$ unless otherwise noted)					
PARAMETER	SYMBOL	MBR	MBRF	MBRB	UNIT
Maximum thermal resistance per diode	$R_{\theta JC}$	3.0	5.0	3.0	$^\circ\text{C/W}$

ORDERING INFORMATION (Example)					
PACKAGE	PREFERRED P/N	UNIT WEIGHT (g)	PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
TO-220AB	MBR15H45CT-E3/45	1.85	45	50/tube	Tube
ITO-220AB	MBRF15H45CT-E3/45	1.99	45	50/tube	Tube
TO-263AB	MBRB15H45CT-E3/45	1.35	45	50/tube	Tube
TO-263AB	MBRB15H45CT-E3/81	1.35	81	800/reel	Tape and reel
TO-220AB	MBR15H45CTHE3/45 ⁽¹⁾	1.85	45	50/tube	Tube
ITO-220AB	MBRF15H45CTHE3/45 ⁽¹⁾	1.99	45	50/tube	Tube
TO-263AB	MBRB15H45CTHE3/45 ⁽¹⁾	1.35	45	50/tube	Tube
TO-263AB	MBRB15H45CTHE3/81 ⁽¹⁾	1.35	81	800/reel	Tape and reel
TO-263AB	MBRB15H45CTHE3_A/P ⁽¹⁾	1.35	P	50/tube	Tube
TO-263AB	MBRB15H45CTHE3_A/I ⁽¹⁾	1.35	I	800/reel	Tape and reel

Note

(1) AEC-Q101 qualified



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

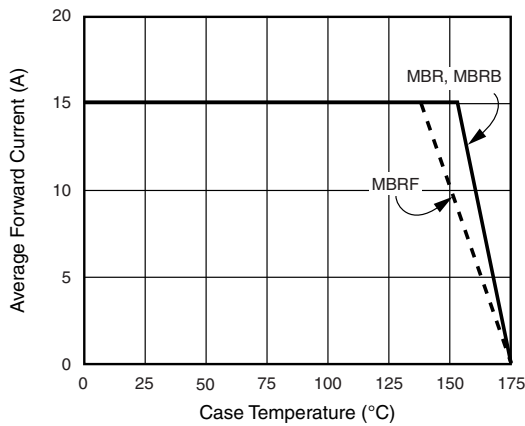


Fig. 1 - Forward Derating Curve Per Diode

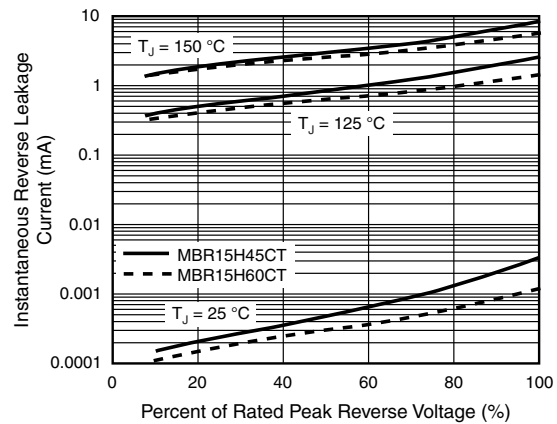


Fig. 4 - Typical Reverse Characteristics Per Diode

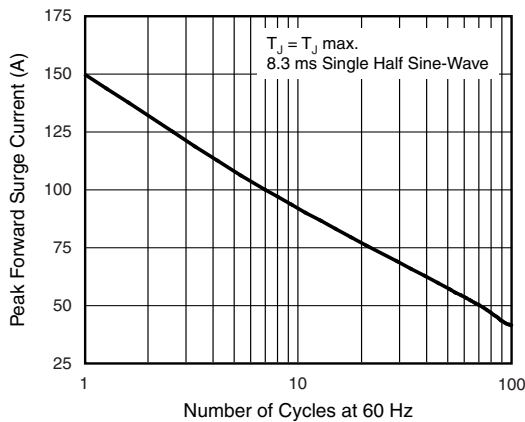


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Diode

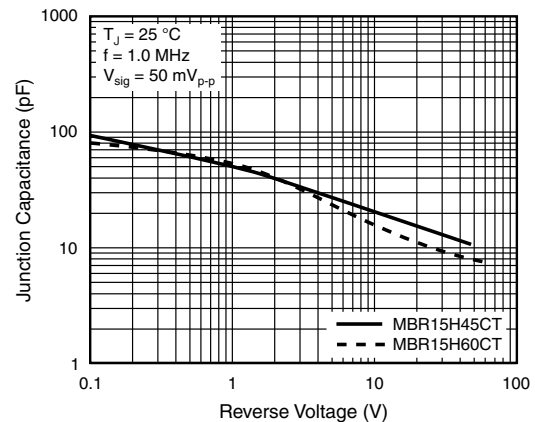


Fig. 5 - Typical Junction Capacitance Per Diode

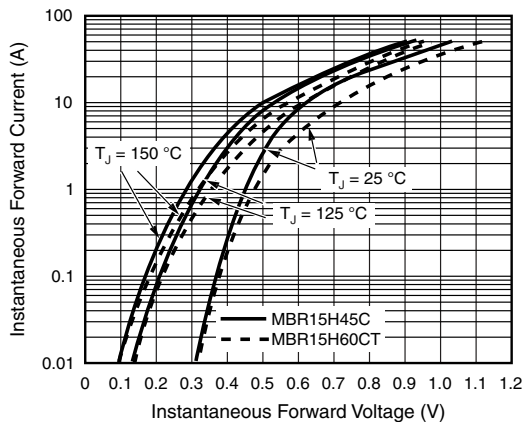


Fig. 3 - Typical Instantaneous Forward Characteristics Per Diode

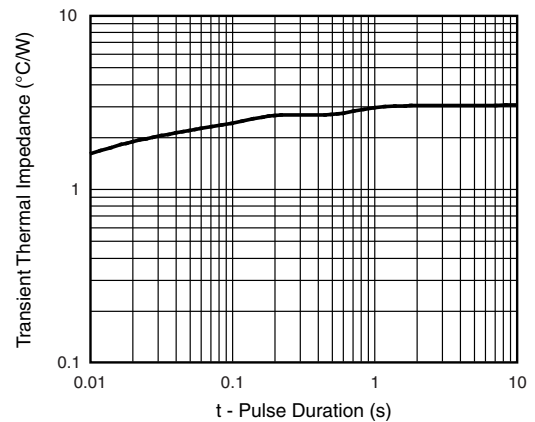
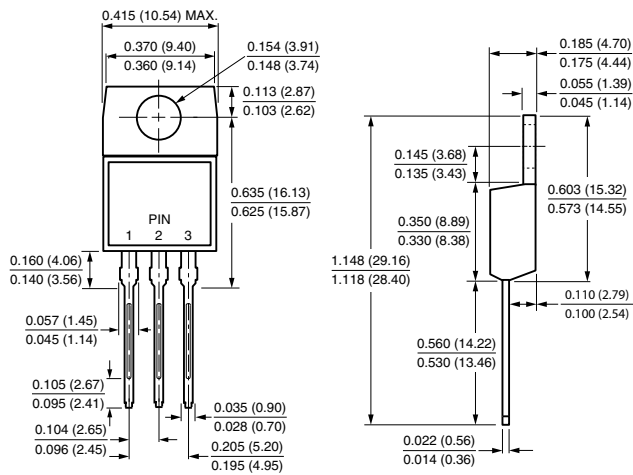


Fig. 6 - Typical Transient Thermal Impedance Per Diode

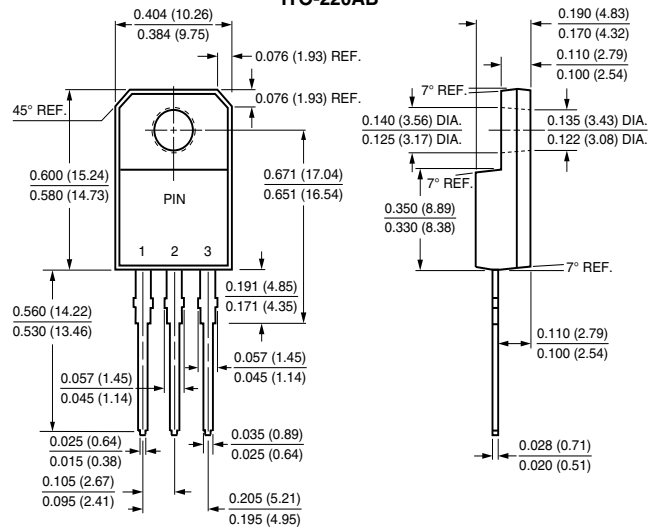


PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

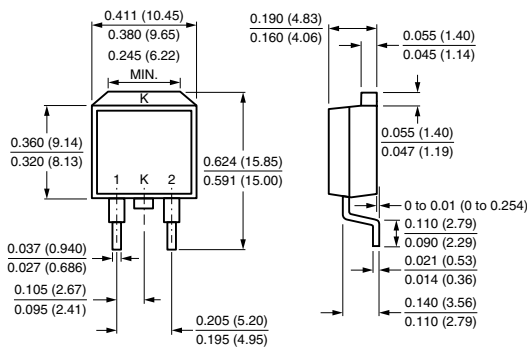
TO-220AB



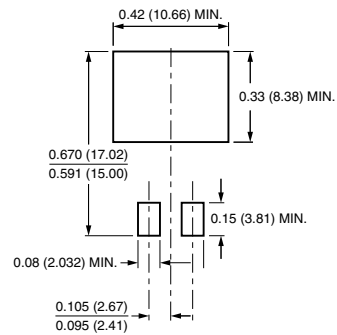
ITO-220AB



TO-263AB



Mounting Pad Layout





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