ELECTRICAL CHARACTERISTICS (T_C = 25 °C unless otherwise noted)								
PARAMETER	**SYMBOL**	**TEST CONDITIONS**		**MBR25H35CT MBR25H45CT**		**MBR25H60CT**		**UNIT**
				TYP.	**MAX.**	**TYP.**	**MAX.**	
Maximum instantaneous forward voltage per diode	V_F (1)	I_F = 15 A	T_J = 25 °C	-	0.64	-	0.70	V
			T_J = 125 °C	0.50	0.54	0.56	0.60	
		I_F = 30 A	T_J = 25 °C	-	0.74	-	0.85	
			T_J = 125 °C	0.63	0.67	0.68	0.72	
Maximum reverse current per diode	I_R (2)	Rated V_R	T_J = 25 °C	-	100	-	100	µA
			T_J = 125 °C	6.0	20	4.0	20	mA

Notes

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

(2) Pulse test: pulse width ≤ 40 ms

THERMAL CHARACTERISTICS (T_C = 25 °C unless otherwise noted)					
PARAMETER	**SYMBOL**	**MBR**	**MBRF**	**MBRB**	**UNIT**
Thermal resistance, junction to case per diode	$R_{\theta JC}$	1.5	4.5	1.5	°C/W

ORDERING INFORMATION (Example)					
PACKAGE	**PREFERRED P/N**	**UNIT WEIGHT (g)**	**PACKAGE CODE**	**BASE QUANTITY**	**DELIVERY MODE**
TO-220AB	MBR25H45CT-E3/45	1.85	45	50/tube	Tube
ITO-220AB	MBRF25H45CT-E3/45	1.99	45	50/tube	Tube
TO-263AB	MBRB25H45CT-E3/45	1.35	45	50/tube	Tube
TO-263AB	MBRB25H45CT-E3/81	1.35	81	800/reel	Tape and reel
TO-220AB	MBR25H60CT-E3/4W (1)	1.85	4W	50/tube	Tube
TO-220AB	MBR25H45CTHE3/45 (1)	1.85	45	50/tube	Tube
ITO-220AB	MBRF25H45CTHE3/45 (1)	1.99	45	50/tube	Tube
TO-263AB	MBRB25H45CTHE3/45 (1)	1.35	45	50/tube	Tube
TO-263AB	MBRB25H45CTHE3/81 (1)	1.35	81	800/reel	Tape and reel
TO-263AB	MBRB25H45CTHE3_A/P (1)	1.35	P	50/tube	Tube
TO-263AB	MBRB25H45CTHE3_A/I (1)	1.35	I	800/reel	Tape and reel

Note

(1) AEC-Q101 qualified

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

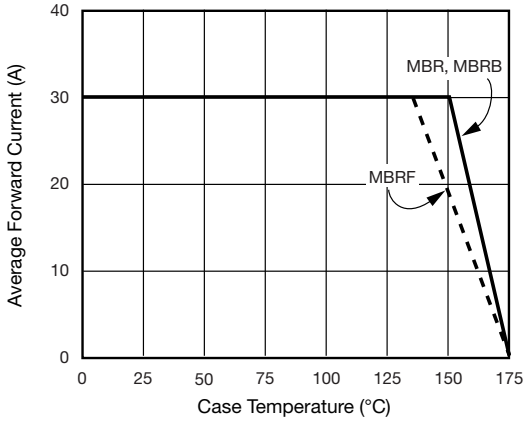


Fig. 1 - Forward Derating Curve (Total)

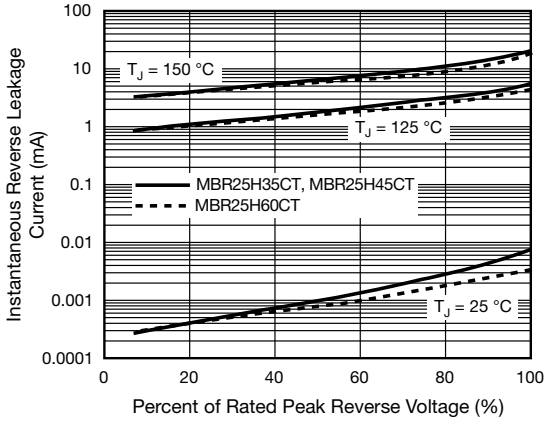


Fig. 4 - Typical Reverse Characteristics Per Diode

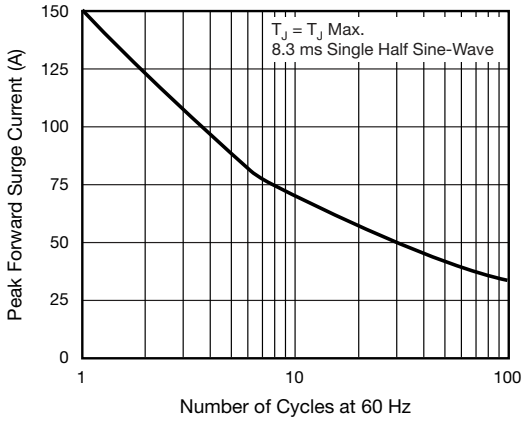


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Diode

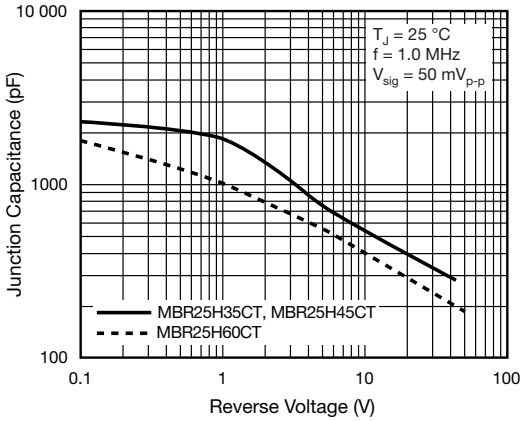


Fig. 5 - Typical Junction Capacitance Per Diode

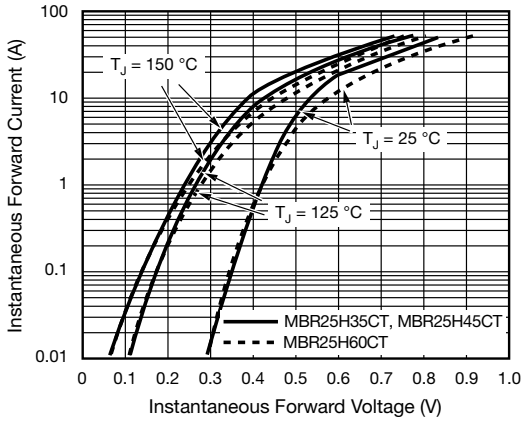


Fig. 3 - Typical Instantaneous Forward Characteristics Per Diode

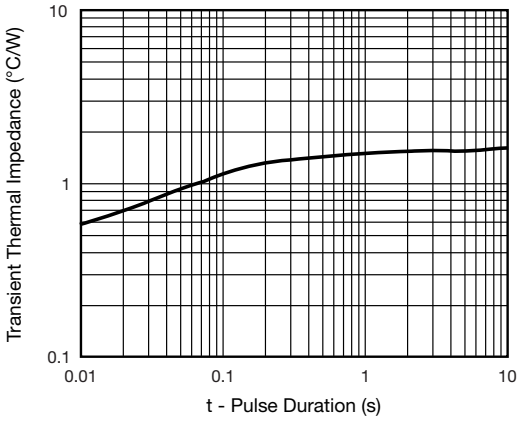
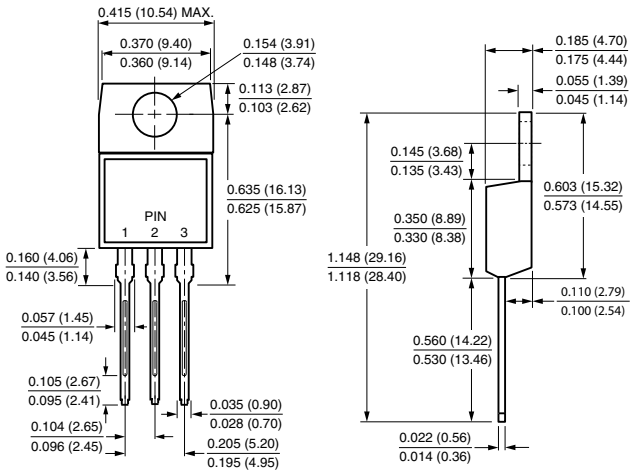


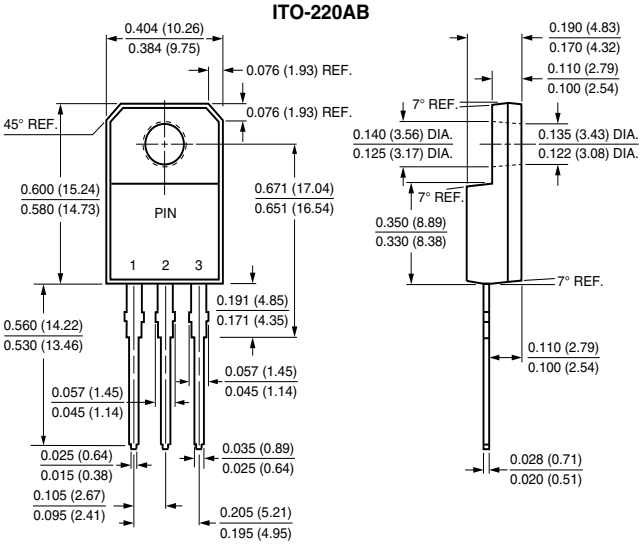
Fig. 6 - Typical Transient Thermal Impedance Per Diode

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

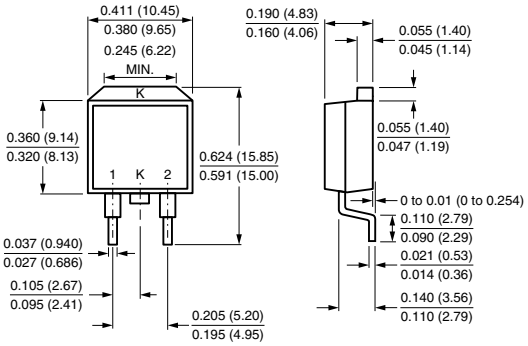
TO-220AB



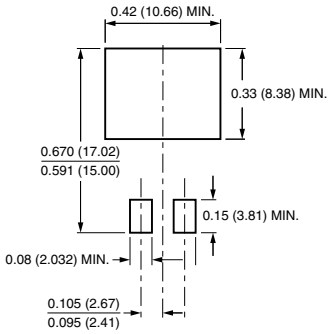
ITO-220AB



TO-263AB



Mounting Pad Layout



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