



ELECTRICAL CHARACTERISTICS ($T_C = 25\text{ }^\circ\text{C}$ unless otherwise noted)					
PARAMETER	SYMBOL	TEST CONDITIONS		VALUE	UNIT
Maximum instantaneous forward voltage	$V_F^{(1)}$	12.5 A	$T_J = 125\text{ }^\circ\text{C}$	0.39	V
			$T_J = 25\text{ }^\circ\text{C}$	0.49	
Maximum instantaneous reverse current at DC blocking voltage per diode	$I_R^{(2)}$	Rated V_R	$T_J = 25\text{ }^\circ\text{C}$	0.90	mA
			$T_J = 100\text{ }^\circ\text{C}$	50	
			$T_J = 125\text{ }^\circ\text{C}$	100	

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	SBL	SBLF	SBLB	UNIT
Typical thermal resistance from junction to case per diode	$R_{\theta JC}$	1.5	4.0	1.5	$^\circ\text{C/W}$

ORDERING INFORMATION (Example)					
PACKAGE	PREFERRED P/N	UNIT WEIGHT (g)	PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
TO-220AB	SBL25L30CT-E3/45	1.85	45	50/tube	Tube
ITO-220AB	SBLF25L30CT-E3/45	1.99	45	50/tube	Tube
TO-263AB	SBLB25L30CT-E3/45	1.35	45	50/tube	Tube
TO-263AB	SBLB25L30CT-E3/81	1.35	81	800/reel	Tape and reel
ITO-220AB	SBLF25L30CTHE3_A/P ⁽¹⁾	1.99	P	50/tube	Tube
TO-263AB	SBLB25L30CTHE3_B/P ⁽¹⁾	1.35	P	50/tube	Tube
TO-263AB	SBLB25L30CTHE3_B/I ⁽¹⁾	1.35	I	800/reel	Tape and reel

Note

- (1) AEC-Q101 qualified, available in ITO-220AB and D²PAK (TO-263AB)



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

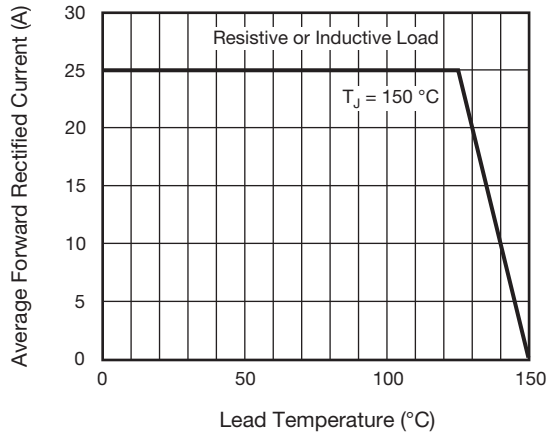


Fig. 1 - Forward Current Derating Curve

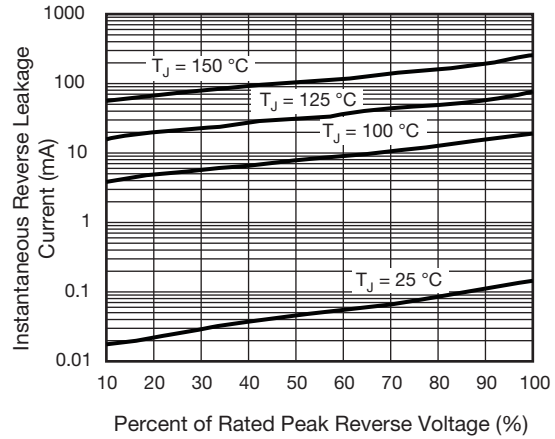


Fig. 4 - Typical Reverse Characteristics Per Diode

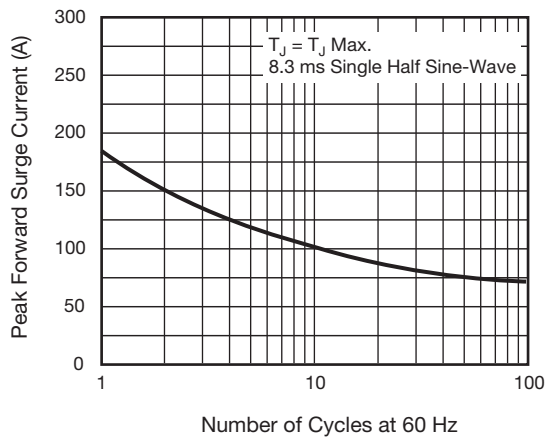


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Diode

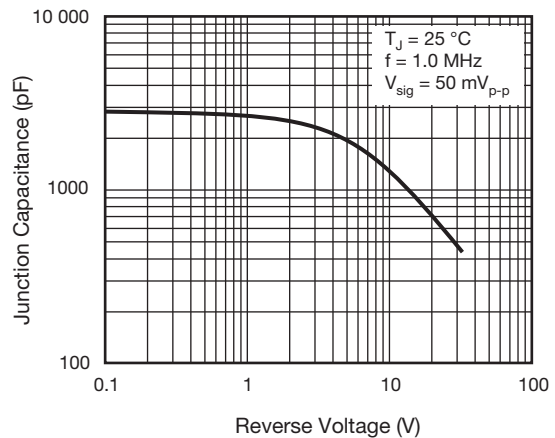


Fig. 5 - Typical Junction Capacitance Per Diode

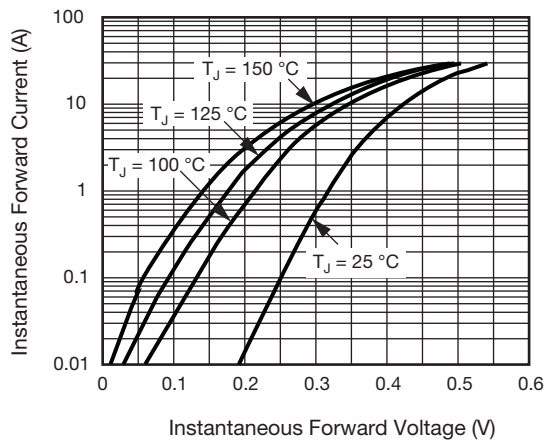


Fig. 3 - Typical Instantaneous Forward Characteristics Per Diode

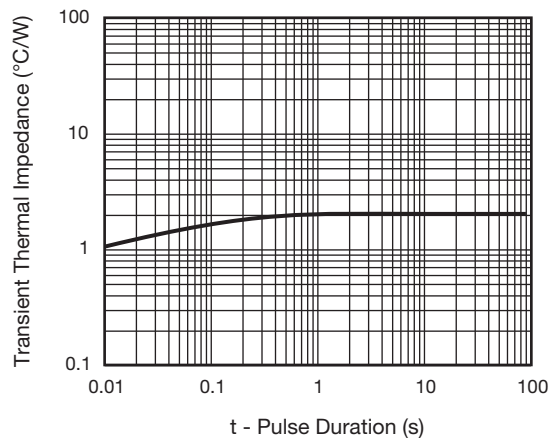
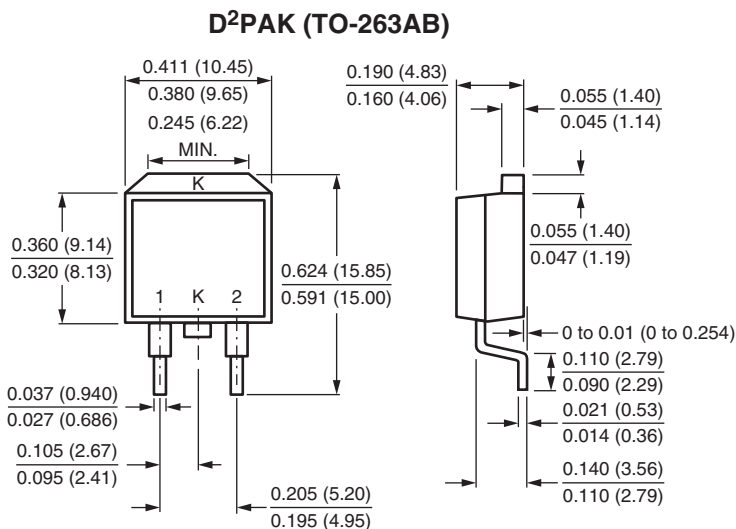
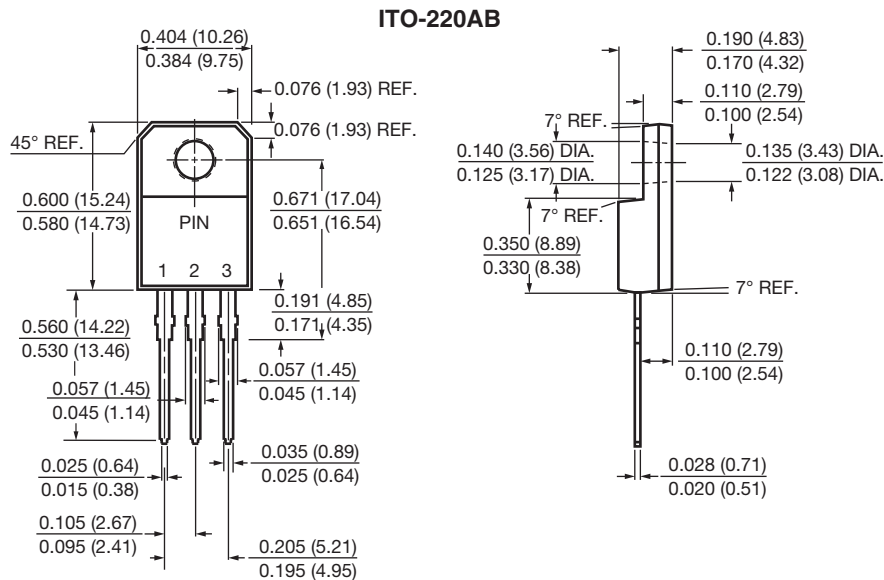
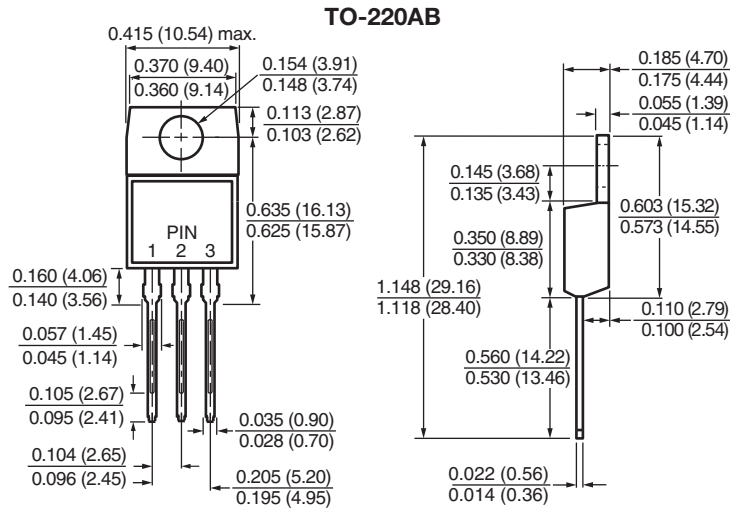


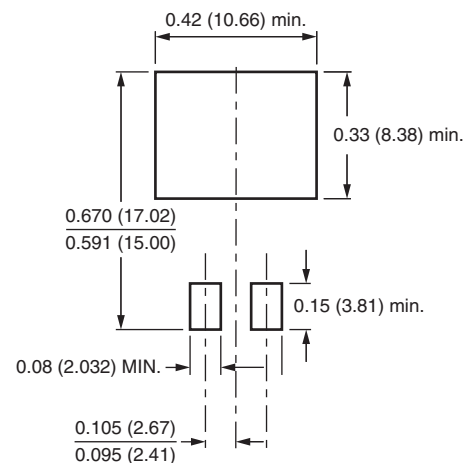
Fig. 6 - Typical Transient Thermal Impedance Per Diode



PACKAGE OUTLINE DIMENSIONS in inches (millimeters)



Mounting Pad Layout





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