

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

PARAMETER	SYMBOL	TEST CONDITIONS	VALUE	UNIT
Maximum instantaneous forward voltage per diode	$V_F^{(1)}$	8.0 A	0.55	V
Maximum instantaneous reverse current at DC blocking voltage per diode	$I_R^{(2)}$	Rated V_R	$T_C = 25\text{ }^{\circ}\text{C}$	mA
			$T_C = 100\text{ }^{\circ}\text{C}$	

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	$R_{\theta JC}$	2.0	4.0	2.0	$^{\circ}\text{C/W}$

ORDERING INFORMATION (Example)

PACKAGE	PREFERRED P/N	UNIT WEIGHT (g)	PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
TO-220AB	SBL1640CT-E3/45	1.85	45	50/tube	Tube
ITO-220AB	SBLF1640CT-E3/45	1.99	45	50/tube	Tube
TO-263AB	SBLB1640CT-E3/45	1.35	45	50/tube	Tube
TO-263AB	SBLB1640CT-E3/81	1.35	81	800/reel	Tape and reel
TO-220AB	SBL1640CTHE3/45 ⁽¹⁾	1.85	45	50/tube	Tube
ITO-220AB	SBLF1640CTHE3/45 ⁽¹⁾	1.99	45	50/tube	Tube
TO-263AB	SBLB1640CTHE3/45 ⁽¹⁾	1.35	45	50/tube	Tube
TO-263AB	SBLB1640CTHE3/81 ⁽¹⁾	1.35	81	800/reel	Tape and reel
TO-263AB	SBLB1640CTHE3_A/P ⁽¹⁾	1.35	P	50/tube	Tube
TO-263AB	SBLB1640CTHE3_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)

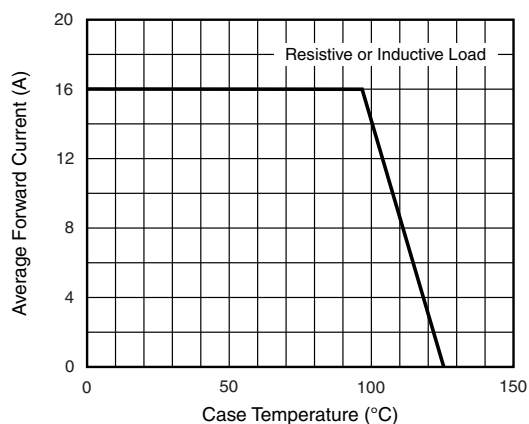


Fig. 1 - Forward Current Derating Curve

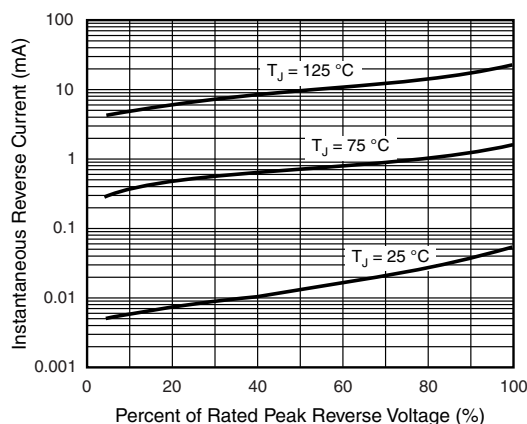


Fig. 4 - Typical Reverse Characteristics Per Diode

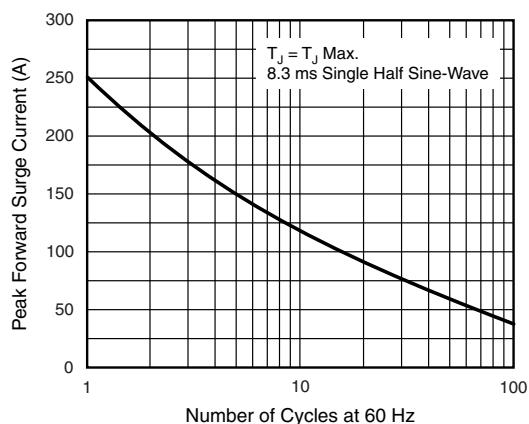


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Diode

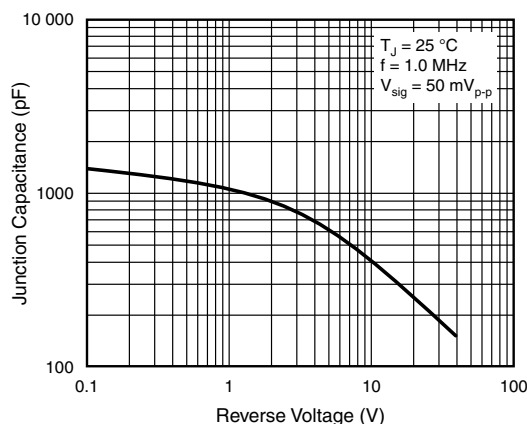


Fig. 5 - Typical Junction Capacitance Per Diode

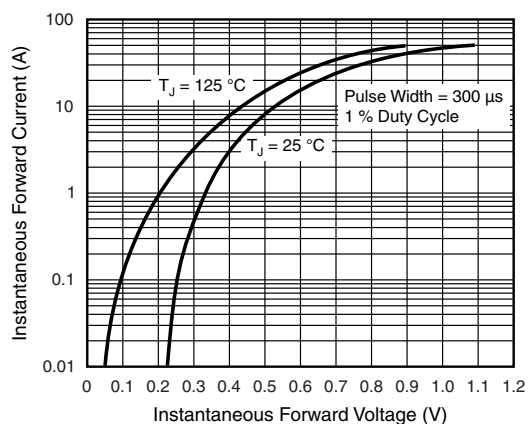


Fig. 3 - Typical Instantaneous Forward Characteristics Per Diode

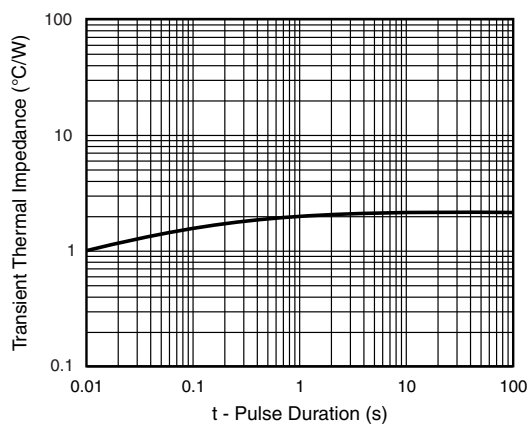
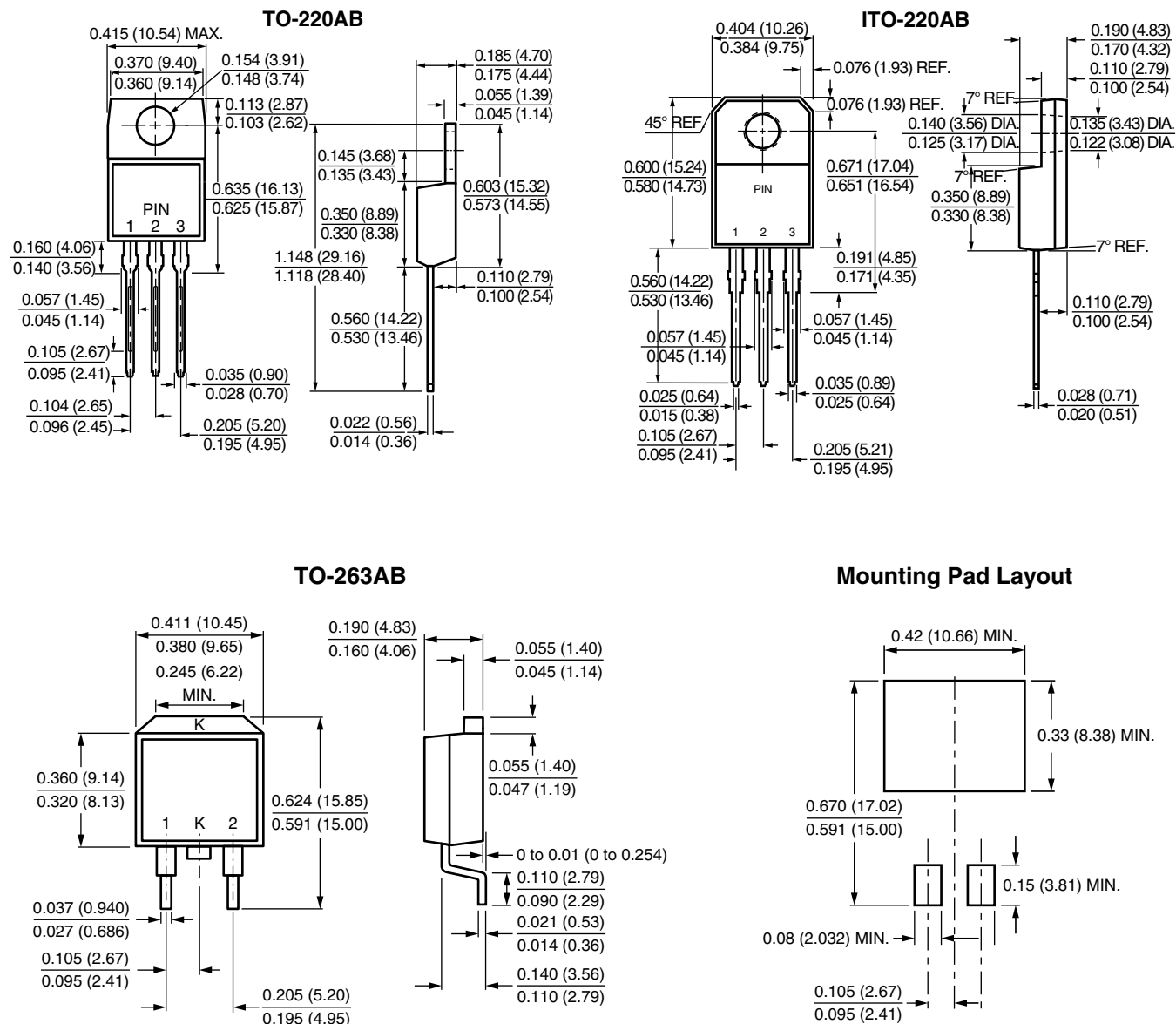


Fig. 6 - Typical Transient Thermal Impedance Per Diode



PACKAGE OUTLINE DIMENSIONS in inches (millimeters)





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