



ELECTRICAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)						
PARAMETER	TEST CONDITIONS		SYMBOL	VALUE	UNIT	
Maximum instantaneous forward voltage	I _F = 0.6 A		V _F ⁽¹⁾	0.865	V	
	I _F = 1.0 A		V _F	0.920		
Maximum DC reverse current at rated DC blocking voltage			I _R	T _A = 25 °C	5.0	μA
				T _A = 100 °C	100	
Maximum reverse recovery time	I _F = 0.5 A, I _R = 1.0 A, I _{rr} = 0.25 A		t _{rr}	15	ns	
Maximum reverse recovery time	I _F = 0.6 A, V _R = 30 V, dI/dt = 50 A/μs, I _{rr} = 10 % I _{RM}		t _{rr}	T _J = 25 °C	25	ns
				T _J = 100 °C	35	
Maximum stored charge	I _F = 0.6 A, V _R = 30 V, dI/dt = 50 A/μs, I _{rr} = 10 % I _{RM}		Q _{rr}	T _J = 25 °C	10	nC
				T _J = 100 °C	25	
Typical junction capacitance	4.0 V, 1 MHz		C _J	10	pF	

Note

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

THERMAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)						
PARAMETER	SYMBOL	ES1A	ES1B	ES1C	ES1D	UNIT
Typical thermal resistance	R _{θJA} ⁽¹⁾	85				°C/W
	R _{θJL} ⁽¹⁾	35				

Note

(1) Units mounted on PCB 5.0 mm x 5.0 mm (0.013 mm thick) land areas

ORDERING INFORMATION (Example)				
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
ES1D-E3/61T	0.064	61T	1800	7" diameter plastic tape and reel
ES1D-E3/5AT	0.064	5AT	7500	13" diameter plastic tape and reel
ES1DHE3_A/H ⁽¹⁾	0.064	H	1800	7" diameter plastic tape and reel
ES1DHE3_A/I ⁽¹⁾	0.064	I	7500	13" diameter plastic tape and reel
ES1D-M3/61T	0.064	61T	1800	7" diameter plastic tape and reel
ES1D-M3/5AT	0.064	5AT	7500	13" diameter plastic tape and reel
ES1DHM3_A/H ⁽¹⁾	0.064	H	1800	7" diameter plastic tape and reel
ES1DHM3_A/I ⁽¹⁾	0.064	I	7500	13" diameter plastic tape and reel

Note

(1) AEC-Q101 qualified

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

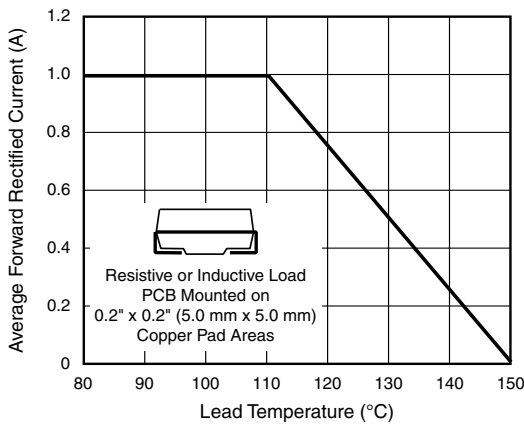


Fig. 1 - Maximum Forward Current Derating Curve

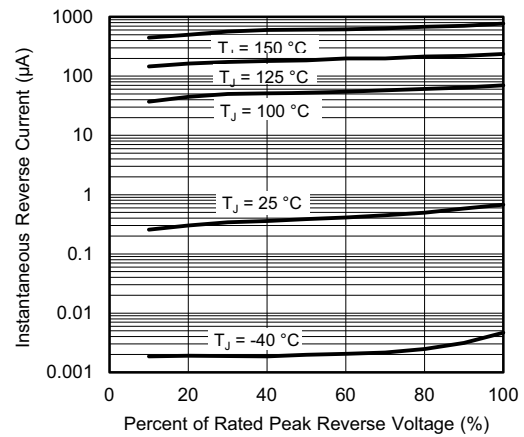


Fig. 4 - Typical Reverse Leakage Characteristics

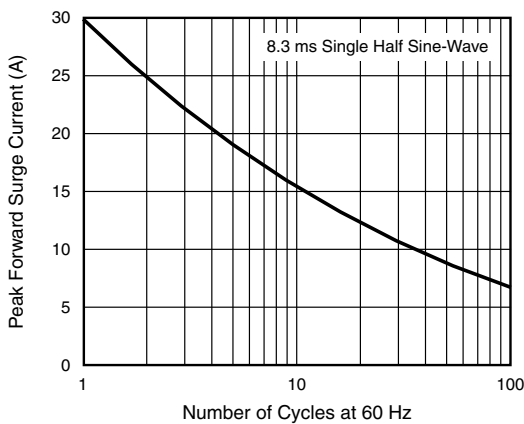


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

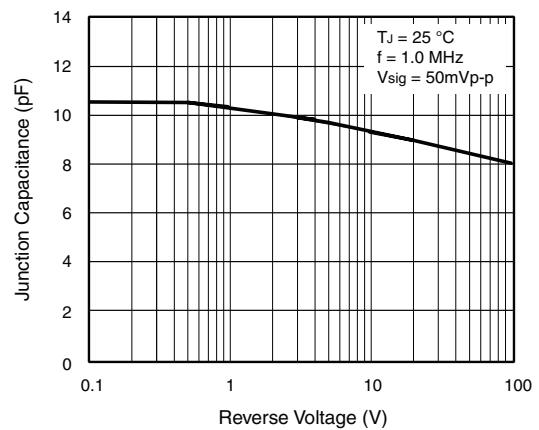


Fig. 5 - Typical Junction Capacitance

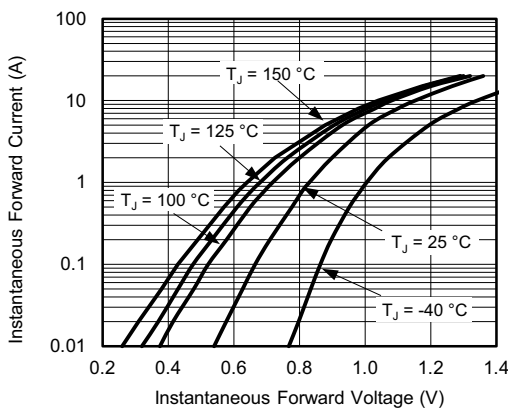


Fig. 3 - Typical Instantaneous Forward Characteristics

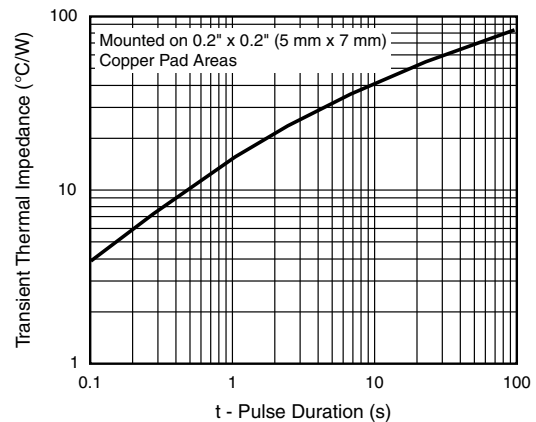
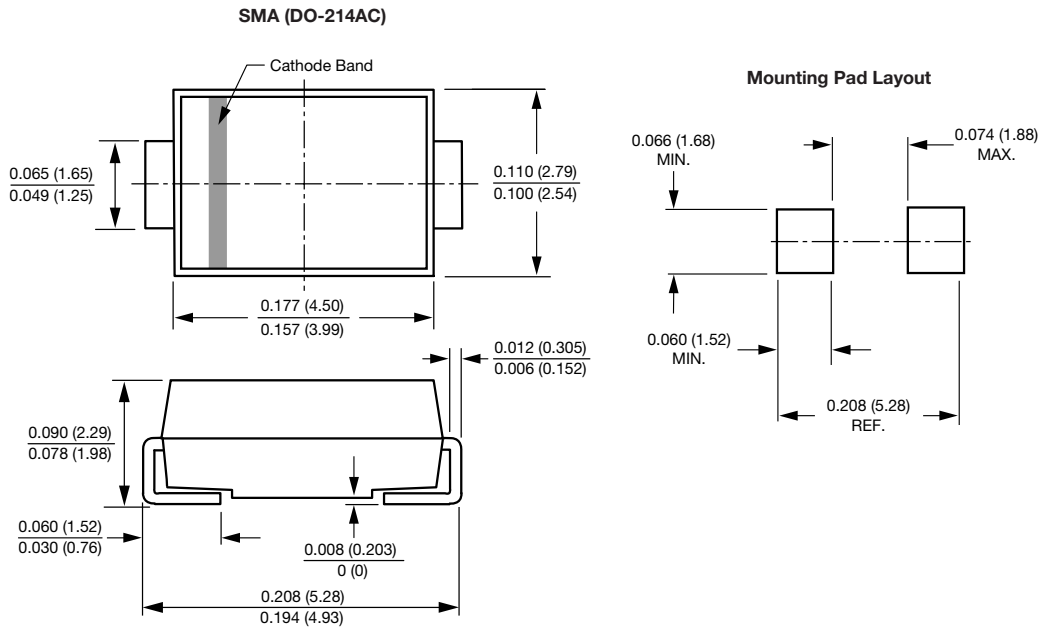


Fig. 6 - Typical Thermal Impedance



PACKAGE OUTLINE DIMENSIONS in inches (millimeters)





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