



ELECTRICAL CHARACTERISTICS ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)							
PARAMETER	TEST CONDITIONS	SYMBOL	ES2A	ES2B	ES2C	ES2D	UNIT
Maximum instantaneous forward voltage	2.0 A	$V_F^{(1)}$	0.90				V
Maximum DC reverse current at rated DC blocking voltage		I_R	$T_A = 25\text{ }^\circ\text{C}$			10	μA
			$T_A = 100\text{ }^\circ\text{C}$			350	
Max. reverse recovery time	$I_F = 0.5\text{ A}$, $I_R = 1.0\text{ A}$, $I_{rr} = 0.25\text{ A}$	t_{rr}	20				ns
Maximum reverse recovery time	$I_F = 2.0\text{ A}$, $V_R = 30\text{ V}$, $dI/dt = 50\text{ A}/\mu\text{s}$, $I_r = 10\% I_{RM}$	t_{rr}	$T_J = 25\text{ }^\circ\text{C}$			30	ns
			$T_J = 100\text{ }^\circ\text{C}$			50	
Maximum stored charge	$I_F = 2.0\text{ A}$, $V_R = 30\text{ V}$, $dI/dt = 50\text{ A}/\mu\text{s}$, $I_r = 10\% I_{RM}$	Q_{rr}	$T_J = 25\text{ }^\circ\text{C}$			10	nC
			$T_J = 100\text{ }^\circ\text{C}$			25	
Typical junction capacitance	4.0 V, 1 MHz	C_J	18				pF

Note

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

THERMAL CHARACTERISTICS ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)						
PARAMETER	SYMBOL	ES2A	ES2B	ES2C	ES2D	UNIT
Typical thermal resistance	$R_{\theta JA}^{(1)}$	75				$^\circ\text{C}/\text{W}$
	$R_{\theta JL}^{(1)}$	20				

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
ES2D-E3/52T	0.096	52T	750	7" diameter plastic tape and reel
ES2D-E3/5BT	0.096	5BT	3200	13" diameter plastic tape and reel
ES2DHE3_A/H ⁽¹⁾	0.096	H	750	7" diameter plastic tape and reel
ES2DHE3_A/I ⁽¹⁾	0.096	I	3200	13" diameter plastic tape and reel
ES2D-M3/52T	0.096	52T	750	7" diameter plastic tape and reel
ES2D-M3/5BT	0.096	5BT	3200	13" diameter plastic tape and reel
ES2DHM3_A/H ⁽¹⁾	0.096	H	750	7" diameter plastic tape and reel
ES2DHM3_A/I ⁽¹⁾	0.096	I	3200	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)

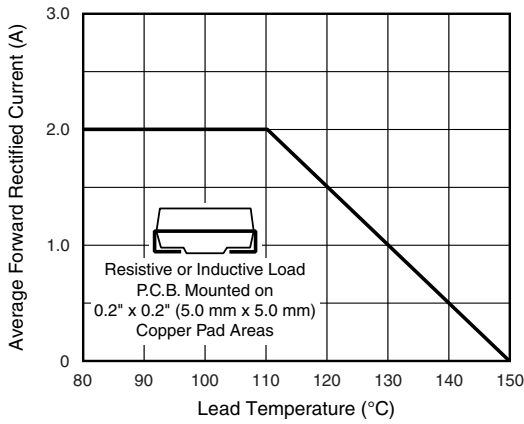


Fig. 1 - Maximum Forward Current Derating Curve

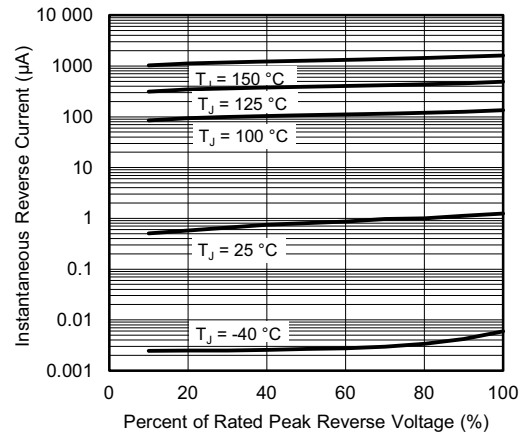


Fig. 4 - Typical Reverse Leakage Characteristics

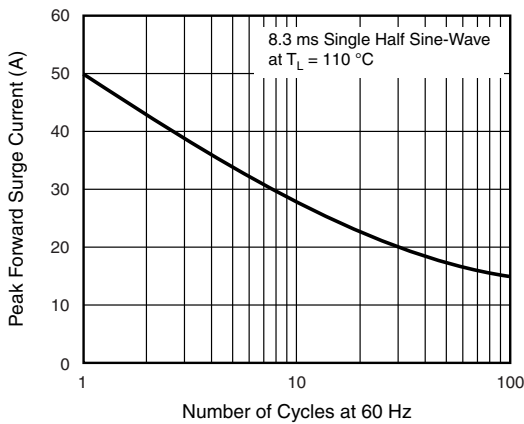


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

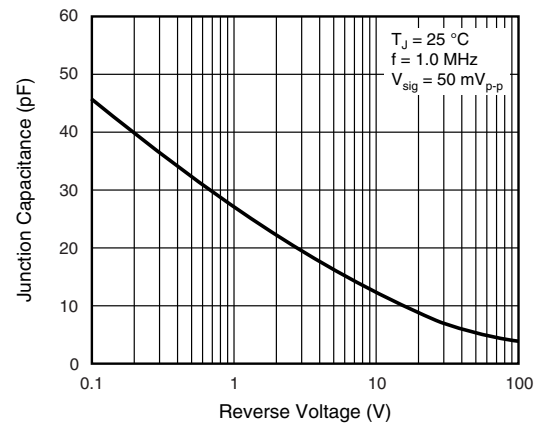


Fig. 5 - Typical Junction Capacitance

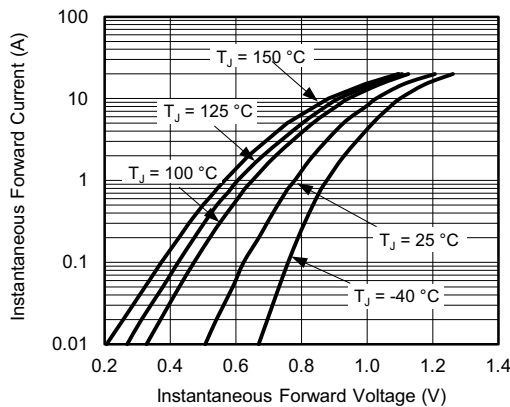


Fig. 3 - Typical Instantaneous Forward Characteristics

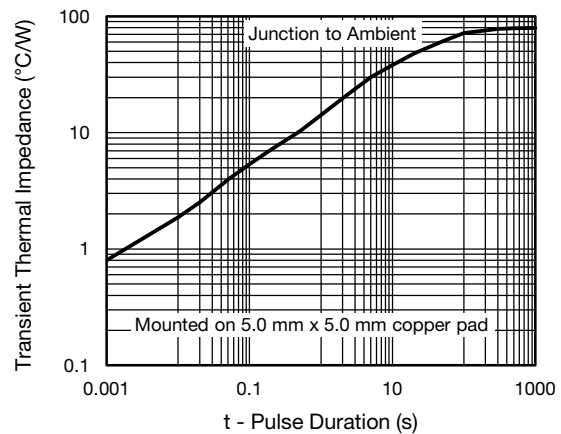
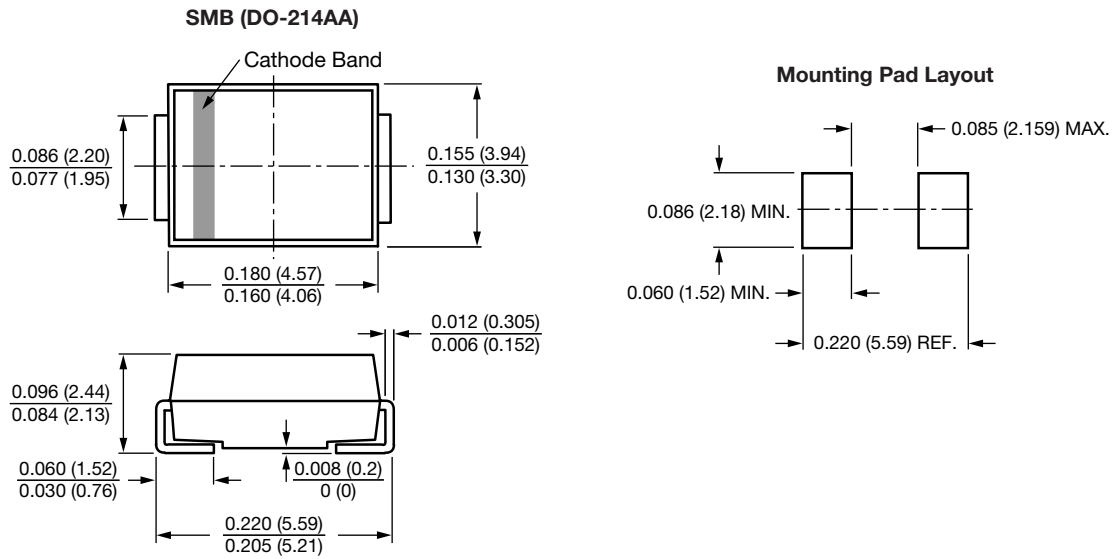


Fig. 6 - Transient Thermal Impedance



PACKAGE OUTLINE DIMENSIONS in inches (millimeters)





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