



<b>ELECTRICAL CHARACTERISTICS</b> ( $T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)					
PARAMETER	TEST CONDITIONS		SYMBOL	VALUE	UNIT
Maximum instantaneous forward voltage	$I_F = 2\text{ A}$		$V_F^{(1)}$	0.93	V
Maximum DC reverse current at rated DC blocking voltage	$T_A = 25\text{ }^\circ\text{C}$		$I_R$	2.0	$\mu\text{A}$
	$T_A = 125\text{ }^\circ\text{C}$			50	
Maximum reverse recovery time	$I_F = 0.5\text{ A}, I_R = 1\text{ A}, I_{rr} = 0.25\text{ A}$		$t_{rr}$	25	ns
Typical reverse recovery time	$I_F = 2\text{ A}, V_R = 30\text{ V},$ $di/dt = 50\text{ A}/\mu\text{s}, I_{rr} = 10\% I_{RM}$	$T_J = 25\text{ }^\circ\text{C}$	$t_{rr}$	35	ns
		$T_J = 100\text{ }^\circ\text{C}$		55	
Typical stored charge	$I_F = 2\text{ A}, V_R = 30\text{ V},$ $di/dt = 50\text{ A}/\mu\text{s}, I_{rr} = 10\% I_{RM}$	$T_J = 25\text{ }^\circ\text{C}$	$Q_{rr}$	20	nC
		$T_J = 100\text{ }^\circ\text{C}$		35	
Typical junction capacitance	4.0 V, 1 MHz		$C_J$	30	pF

**Note**

(1) Pulse test: 300  $\mu\text{s}$  pulse width, 1 % duty cycle

<b>THERMAL CHARACTERISTICS</b> ( $T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)					
PARAMETER	SYMBOL	ESH2B	ESH2C	ESH2D	UNIT
Typical thermal resistance	$R_{\theta JA}^{(1)}$	65			$^\circ\text{C}/\text{W}$
	$R_{\theta JL}^{(1)}$	20			

**Note**

(1) Units mounted on PCB with 8.0 mm x 8.0 mm land areas

<b>ORDERING INFORMATION</b> (Example)				
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
ESH2D-E3/52T	0.096	52T	750	7" diameter plastic tape and reel
ESH2D-E3/5BT	0.096	5BT	3200	13" diameter plastic tape and reel
ESH2DHE3_A/H <sup>(1)</sup>	0.096	H	750	7" diameter plastic tape and reel
ESH2DHE3_A/I <sup>(1)</sup>	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)

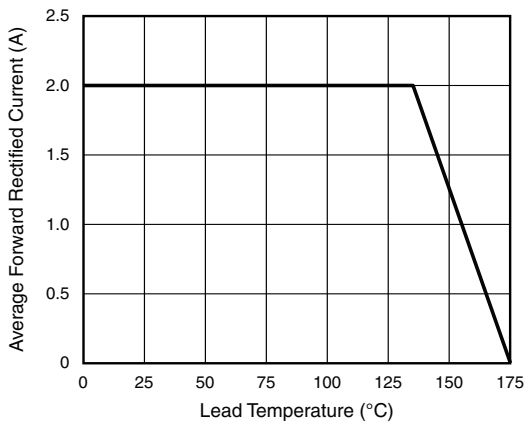


Fig. 1 - Maximum Forward Current Derating Curve

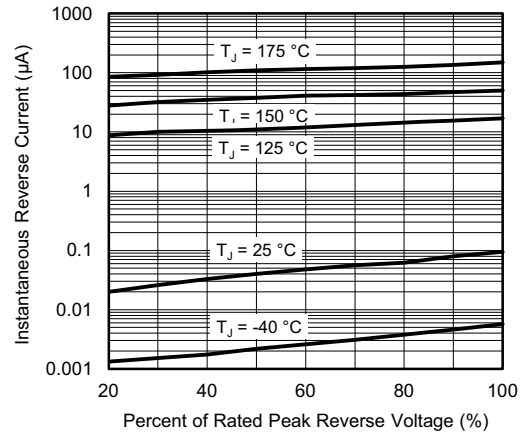


Fig. 4 - Typical Reverse Leakage Characteristics

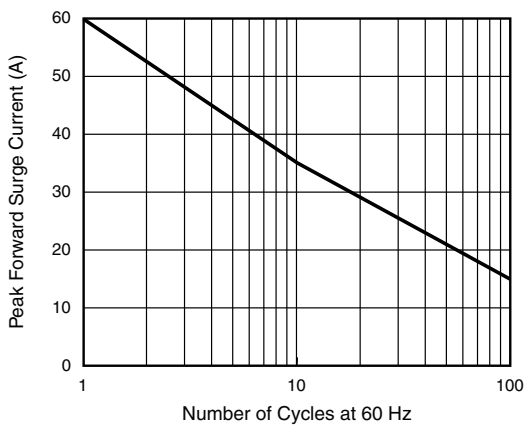


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

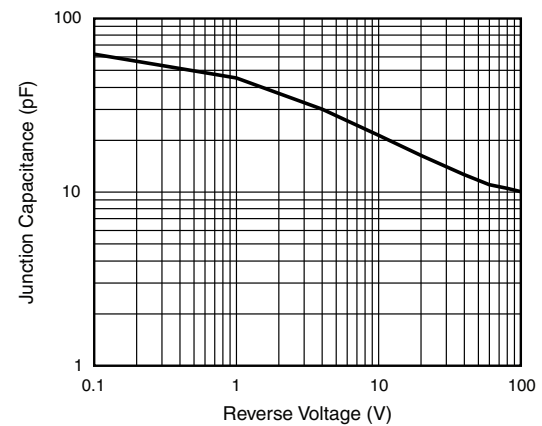


Fig. 5 - Typical Junction Capacitance

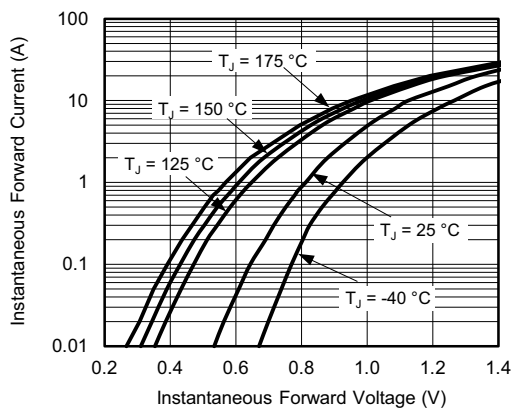


Fig. 3 - Typical Instantaneous Forward Characteristics

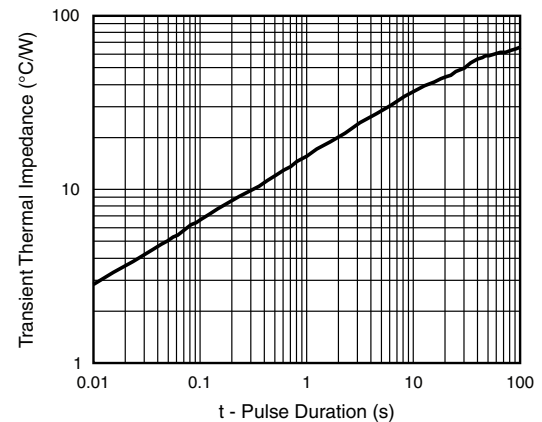
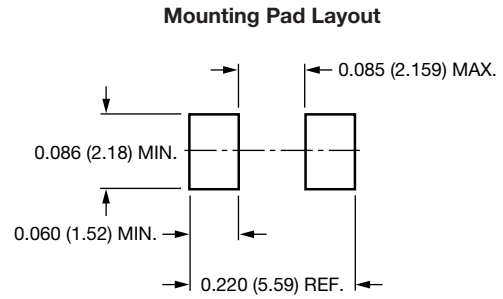
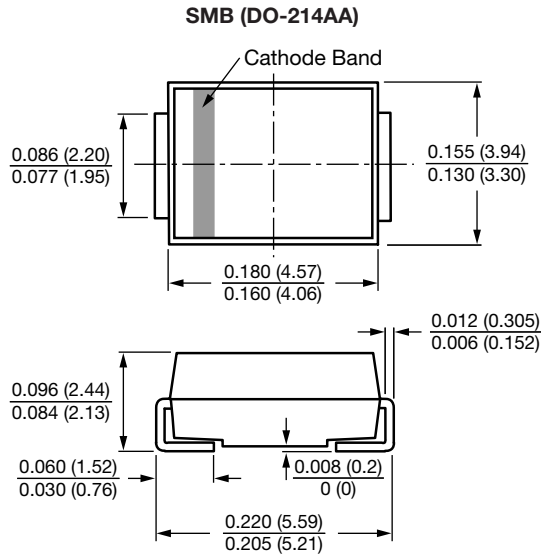


Fig. 6 - Typical Transient Thermal Impedance



## PACKAGE OUTLINE DIMENSIONS in inches (millimeters)





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