ELECTRICAL CHARACTERISTICS (T_A = 25 °C unless otherwise noted)								
PARAMETER	TEST CONDITIONS		SYMBOL	ES3A	ES3B	ES3C	ES3D	UNIT
Maximum instantaneous forward voltage	3.0 A		V_F (1)	0.90				V
Maximum DC reverse current at rated DC blocking voltage		T_A = 25 °C	I_R	10				μA
		T_A = 100 °C		500				
Maximum reverse recovery time	I_F = 0.5 A, I_R = 1.0 A, I_{rr} = 0.25 A		t_{rr}	20				ns
Maximum reverse recovery time	I_F = 3.0 A, V_R = 30 V, dI/dt = 50 A/μs, I_{rr} = 10 % I_{RM}	T_J = 25 °C	t_{rr}	30				ns
		T_J = 100 °C		50				
Maximum stored charge	I_F = 3.0 A, V_R = 30 V, dI/dt = 50 A/μs, I_{rr} = 10 % I_{RM}	T_J = 25 °C	Q_{rr}	15				nC
		T_J = 100 °C		35				
Typical junction capacitance	4.0 V, 1 MHz		C_J	45				pF

Note

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

THERMAL CHARACTERISTICS (T_A = 25 °C unless otherwise noted)							
PARAMETER	SYMBOL	ES3A	ES3B	ES3C	ES3D	UNIT
Typical thermal resistance	$R_{\theta JA}$ (1)	47				°C/W
	$R_{\theta JL}$ (1)	12				

Note

(1) Units mounted on PCB with 0.31" x 0.31" (8.0 mm x 8.0 mm) copper pad areas

ORDERING INFORMATION (Example)				
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
ES3D-E3/57T	0.211	57T	850	7" diameter plastic tape and reel
ES3D-E3/9AT	0.211	9AT	3500	13" diameter plastic tape and reel
ES3DHE3_A/H (1)	0.211	H	850	7" diameter plastic tape and reel
ES3DHE3_A/I (1)	0.211	I	3500	13" diameter plastic tape and reel
ES3D-M3/57T	0.211	57T	850	7" diameter plastic tape and reel
ES3D-M3/9AT	0.211	9AT	3500	13" diameter plastic tape and reel
ES3DHM3_A/H (1)	0.211	H	850	7" diameter plastic tape and reel
ES3DHM3_A/I (1)	0.211	I	3500	13" diameter plastic tape and reel

Note

(1) AEC-Q101 qualified

RATINGS AND CHARACTERISTICS CURVES (T_A = 25 °C unless otherwise noted)

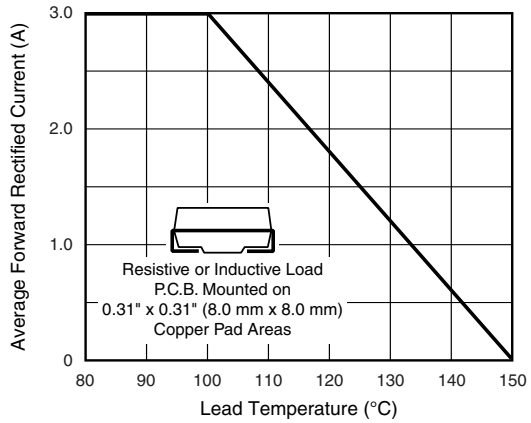


Fig. 1 - Maximum Forward Current Derating Curve

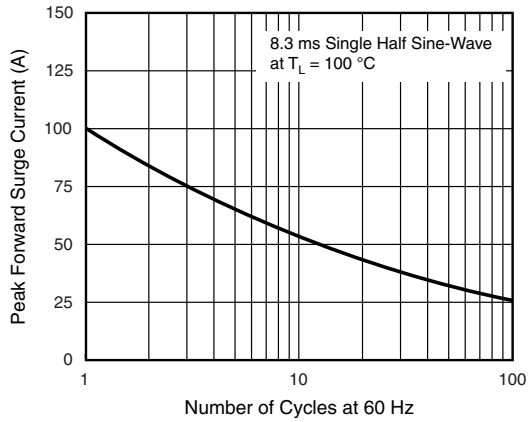


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

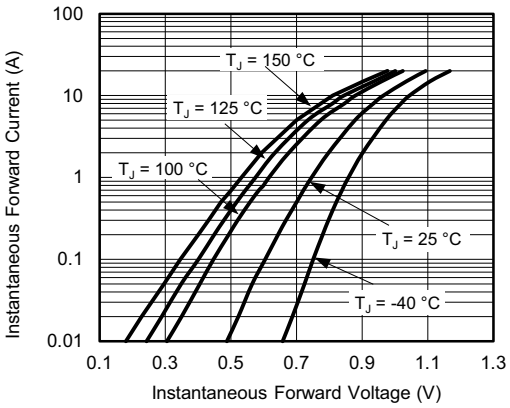


Fig. 3 - Typical Instantaneous Forward Characteristics

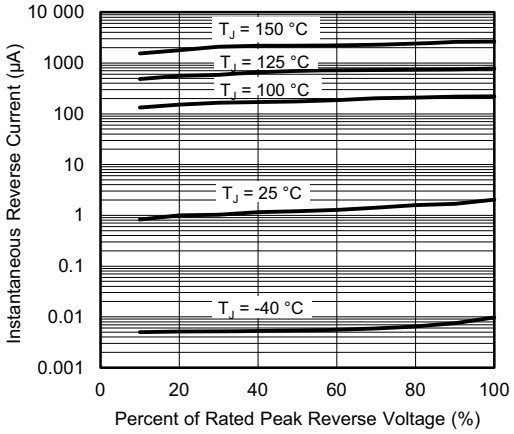


Fig. 4 - Typical Reverse Leakage Characteristics

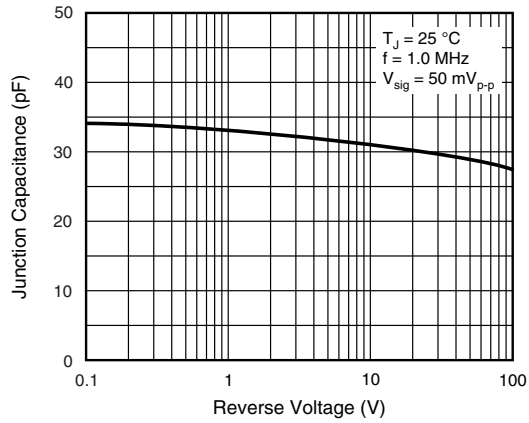
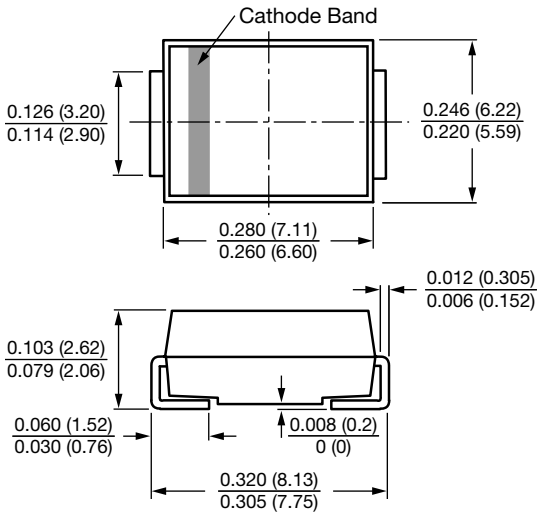


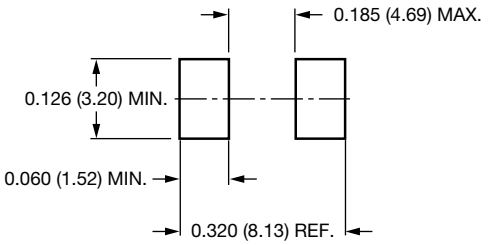
Fig. 5 - Typical Junction Capacitance

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

SMC (DO-214AB)



Mounting Pad Layout



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