

**ELECTRICAL CHARACTERISTICS** ($T_A = 25\text{ °C}$ unless otherwise noted)

PARAMETER	TEST CONDITIONS	SYMBOL	BYS11-90	UNIT	
Maximum instantaneous forward voltage ⁽¹⁾	1.0 A	V_F	750	mV	
Maximum DC reverse current ⁽¹⁾	V_{RRM}	I_R	$T_J = 25\text{ °C}$	100	μA
			$T_J = 100\text{ °C}$	1	mA

Note

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

THERMAL CHARACTERISTICS ($T_A = 25\text{ °C}$ unless otherwise noted)

PARAMETER	SYMBOL	BYS11-90	UNIT
Maximum thermal resistance, junction-to-lead	$R_{\theta JL}$	25	$^{\circ}\text{C}/\text{W}$
Maximum thermal resistance, junction-to-ambient	$R_{\theta JA}$ ⁽¹⁾	150	$^{\circ}\text{C}/\text{W}$
	$R_{\theta JA}$ ⁽²⁾	125	
	$R_{\theta JA}$ ⁽³⁾	100	

Notes

⁽¹⁾ Mounted on epoxy-glass hard tissue

⁽²⁾ Mounted on epoxy-glass hard tissue, 50 mm² 35 μm Cu

⁽³⁾ Mounted on Al-oxide-ceramic (Al_2O_3), 50 mm² 35 μm Cu

ORDERING INFORMATION (Example)

PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
BYS11-90-E3/TR	0.064	TR	1800	7" diameter plastic tape and reel
BYS11-90-E3/TR3	0.064	TR3	7500	13" diameter plastic tape and reel
BYS11-90HE3_A/H ⁽¹⁾	0.064	H	1800	7" diameter plastic tape and reel
BYS11-90HE3_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)

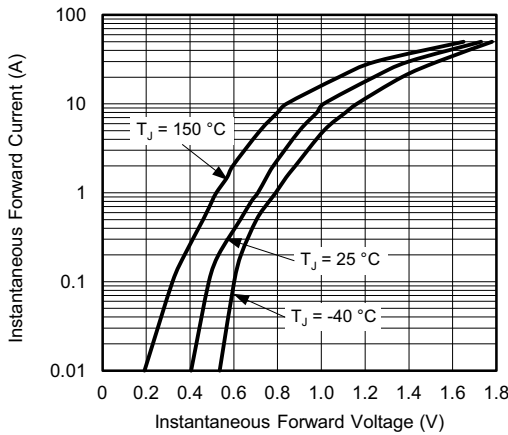


Fig. 1 - Typical Instantaneous Forward Characteristics

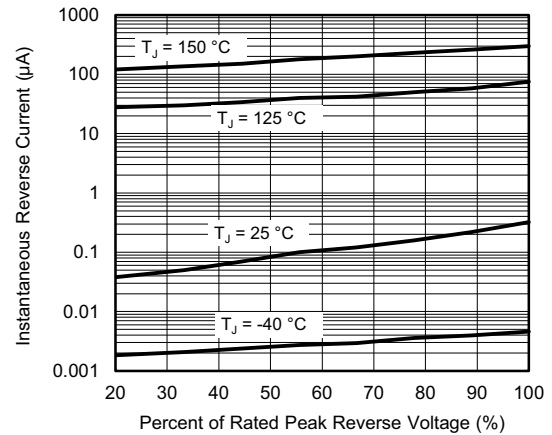


Fig. 4 - Typical Reverse Characteristics

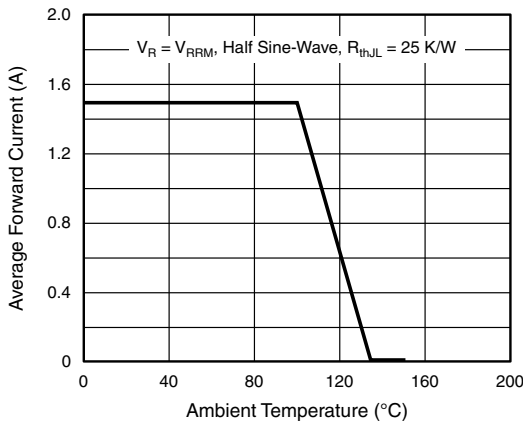


Fig. 2 - Max. Average Forward Current vs. Ambient Temperature

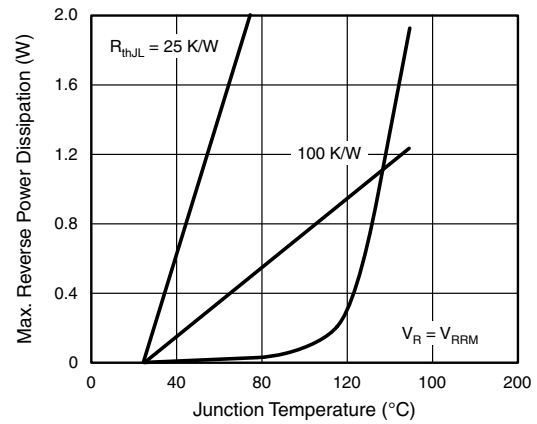


Fig. 5 - Max. Reverse Power Dissipation vs. Junction Temperature

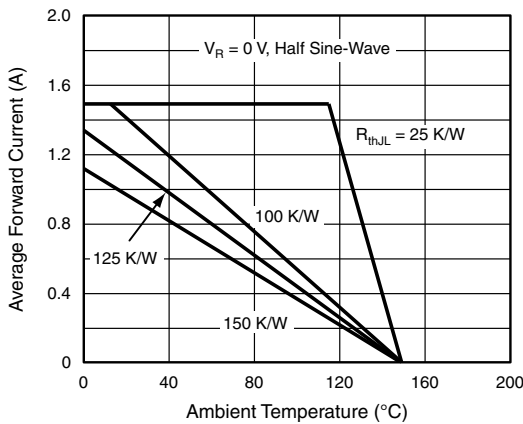


Fig. 3 - Max. Average Forward Current vs. Ambient Temperature

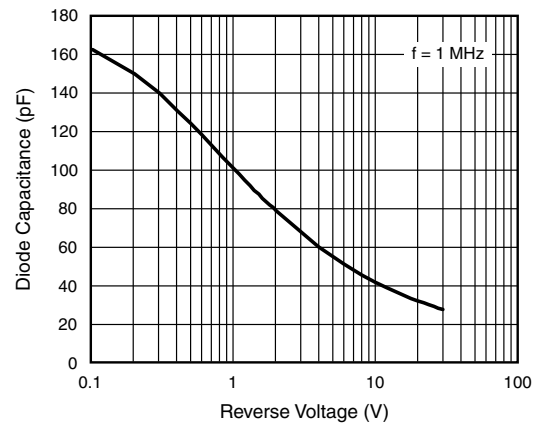
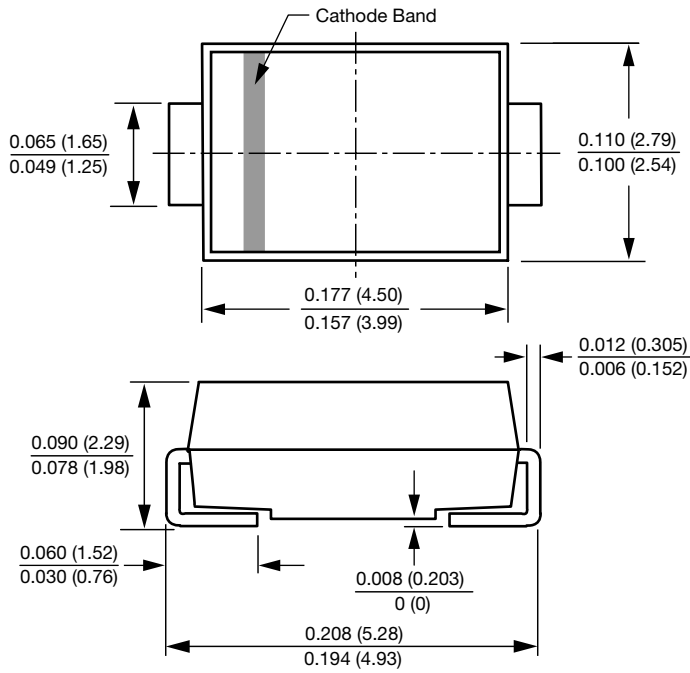


Fig. 6 - Diode Capacitance vs. Reverse Voltage

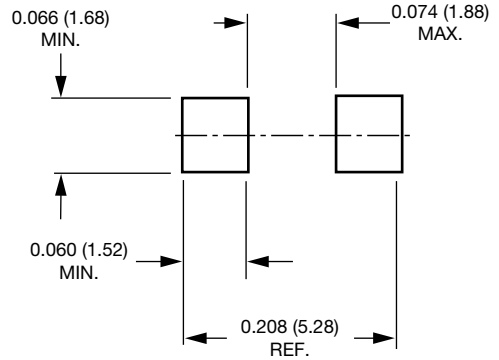


PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

SMA (DO-214AC)



Mounting Pad Layout





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