



ELECTRICAL CHARACTERISTICS ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)							
PARAMETER	TEST CONDITIONS		SYMBOL	BYS10-25	BYS10-35	BYS10-45	UNIT
Maximum instantaneous forward voltage ⁽¹⁾	1.0 A		V_F		500		mV
Maximum DC reverse current ⁽¹⁾	V_{RRM}	$T_J = 25\text{ }^\circ\text{C}$	I_R		500		μA
		$T_J = 100\text{ }^\circ\text{C}$			10		mA

Note

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

THERMAL CHARACTERISTICS ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)						
PARAMETER	SYMBOL	BYS10-25	BYS10-35	BYS10-45	UNIT	
Maximum thermal resistance, junction-to-lead	$R_{\theta JL}$		25		$^\circ\text{C/W}$	
Maximum thermal resistance, junction-to-ambient	$R_{\theta JA}^{(1)}$		150		$^\circ\text{C/W}$	
	$R_{\theta JA}^{(2)}$		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 (Al₂O₃), 50 mm² 35 μm Cu

ORDERING INFORMATION (Example)				
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
BYS10-45-E3/TR	0.064	TR	1800	7" diameter plastic tape and reel
BYS10-45-E3/TR3	0.064	TR3	7500	13" diameter plastic tape and reel
BYS10-45HE3_A/H ⁽¹⁾	0.064	H	1800	7" diameter plastic tape and reel
BYS10-45HE3_A/I ⁽¹⁾	0.064	I	7500	13" diameter plastic tape and reel
BYS10-45-M3/TR	0.064	TR	1800	7" diameter plastic tape and reel
BYS10-45-M3/TR3	0.064	TR3	7500	13" diameter plastic tape and reel
BYS10-45HM3_A/H ⁽¹⁾	0.064	H	1800	7" diameter plastic tape and reel
BYS10-45HM3_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)

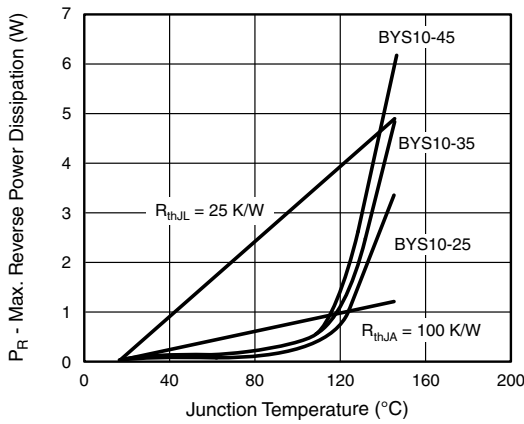


Fig. 1 - Max. Reverse Power Dissipation vs. Junction Temperature

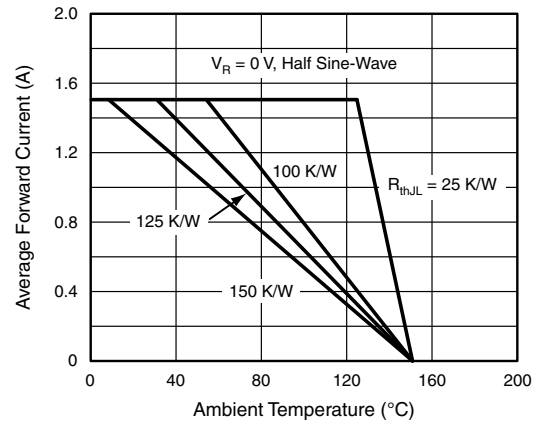


Fig. 4 - Max. Average Forward Current vs. Ambient Temperature

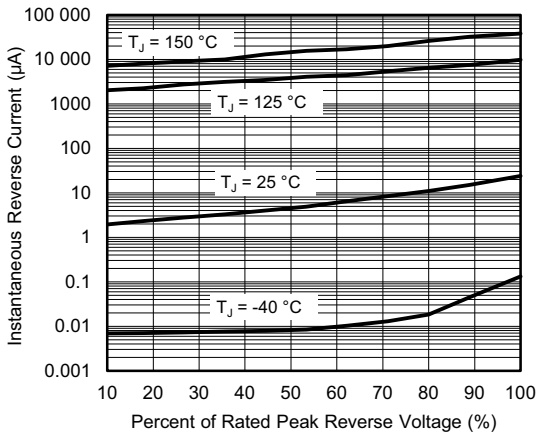


Fig. 2 - Typical Reverse Characteristics

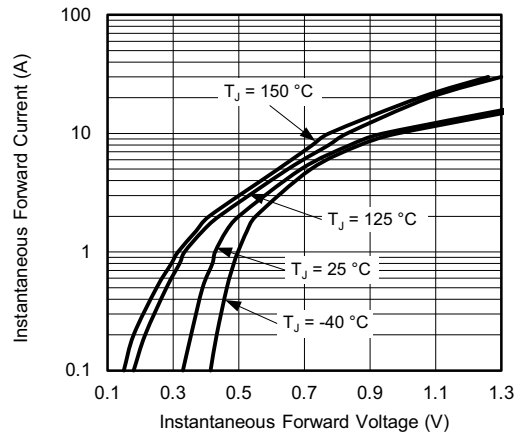


Fig. 5 - Typical Instantaneous Forward Characteristics

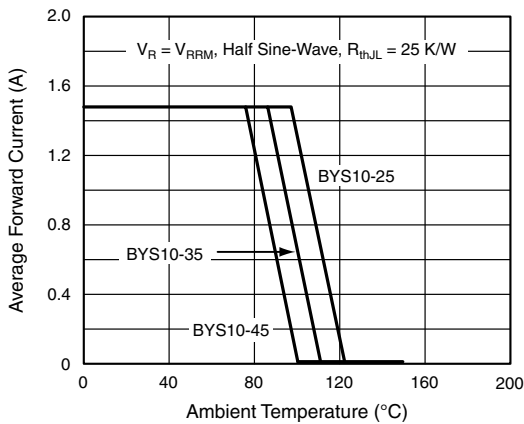


Fig. 3 - Max. Average Forward Current vs. Ambient Temperature

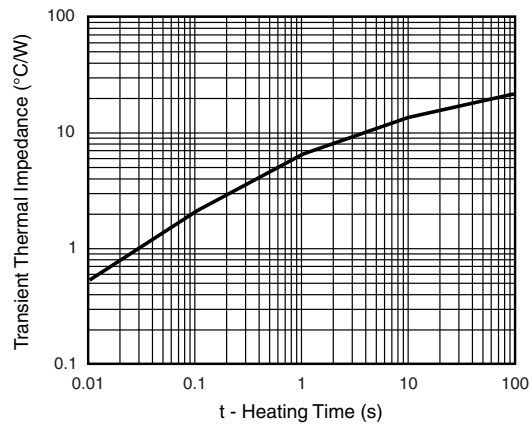
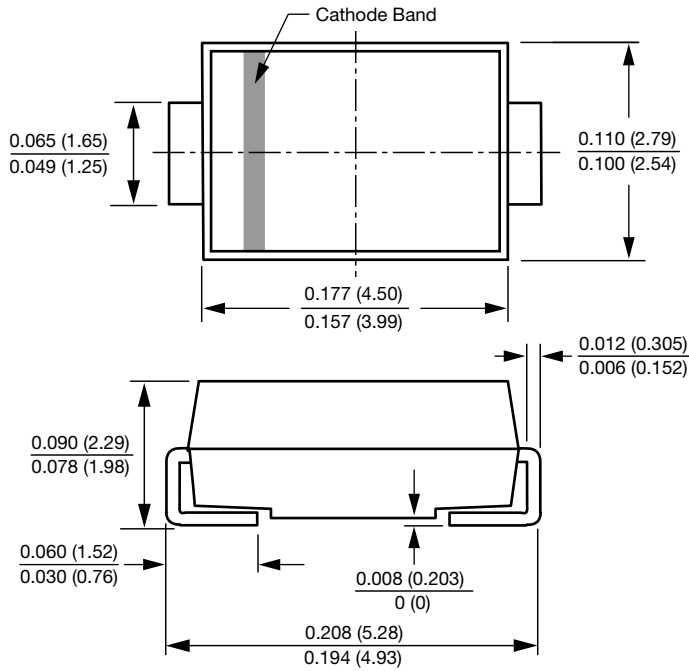


Fig. 6 - Typical Transient Thermal Impedance

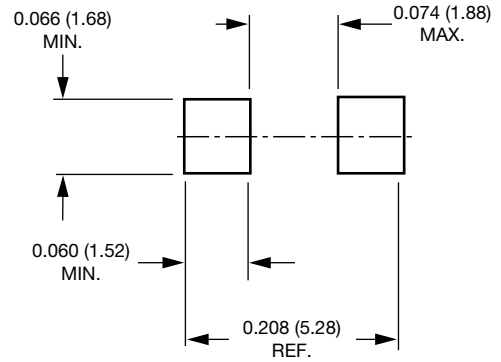


PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

SMA (DO-214AC)



Mounting Pad Layout





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