



<b>ELECTRICAL CHARACTERISTICS</b> ( $T_C = 25\text{ }^\circ\text{C}$ unless otherwise noted)					
PARAMETER	TEST CONDITIONS	SYMBOL	TYP.	MAX.	UNIT
Instantaneous forward voltage <sup>(1)</sup>	$I_F = 1.0\text{ A}$	$T_A = 25\text{ }^\circ\text{C}$	$V_F$	1.74	V
		$T_A = 125\text{ }^\circ\text{C}$		1.39	
Reverse current <sup>(2)</sup>	$V_R = 1300\text{ V}$	$T_A = 25\text{ }^\circ\text{C}$	$I_R$	-	$\mu\text{A}$
		$T_A = 125\text{ }^\circ\text{C}$		2.9	
Maximum reverse recovery time	$I_F = 0.5\text{ A}, I_R = 1.0\text{ A}, I_{rr} = 0.25\text{ A}$	$T_A = 25\text{ }^\circ\text{C}$	$t_{rr}$	65	ns
Forward recovery time	$I_F = 1.5\text{ A}, dI/dt = 12\text{ A}/\mu\text{s}, V_F = 1.1 \times V_F\text{ max.}$	$T_A = 25\text{ }^\circ\text{C}$	$t_{fr}$	620	
Peak forward voltage			$V_{FP}$	9.0	-
Typical junction capacitance	4.0 V, 1 MHz		$C_J$	9.0	pF

**Notes**(1) Pulse test: 300  $\mu\text{s}$  pulse width, 1 % duty cycle(2) Pulse test: Pulse width  $\leq 40\text{ ms}$ 

<b>THERMAL CHARACTERISTICS</b> ( $T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)			
PARAMETER	SYMBOL	BYG23T	UNIT
Typical thermal resistance <sup>(1)</sup>	$R_{\theta JA}$	120	$^\circ\text{C}/\text{W}$
	$R_{\theta JM}$	20	

**Note**(1) Free air, mounted on recommended PCB 1 oz. pad area. Thermal resistance  $R_{\theta JA}$  - junction to ambient,  $R_{\theta JM}$  - junction to mount

<b>ORDERING INFORMATION</b> (Example)				
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
BYG23T-M3/TR	0.064	TR	1800	7" diameter plastic tape and reel
BYG23T-M3/TR3	0.064	TR3	7500	13" diameter plastic tape and reel

**RATINGS AND CHARACTERISTICS CURVES** ( $T_A = 25\text{ }^\circ\text{C}$  unless otherwise noted)

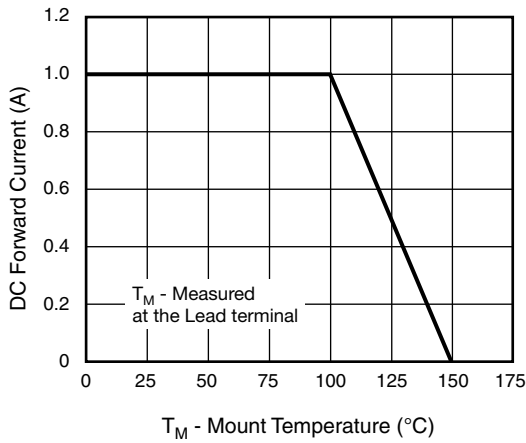


Fig. 1 - Max. Forward Current Derating Curve

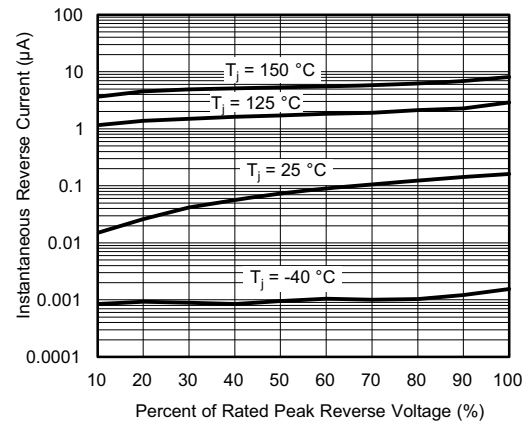


Fig. 4 - Typical Reverse Characteristics

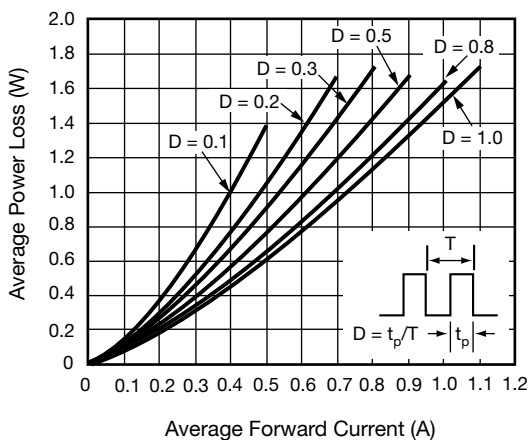


Fig. 2 - Forward Power Loss Characteristics

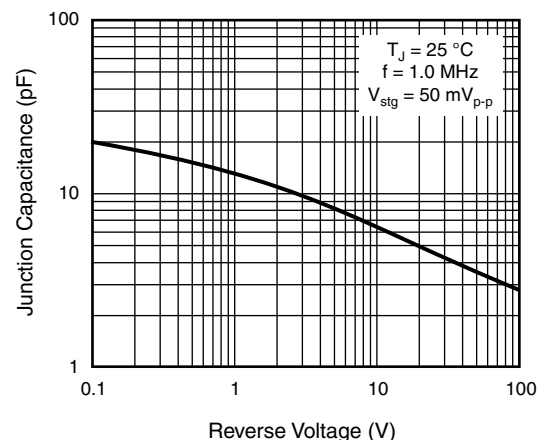


Fig. 5 - Typical Junction Capacitance

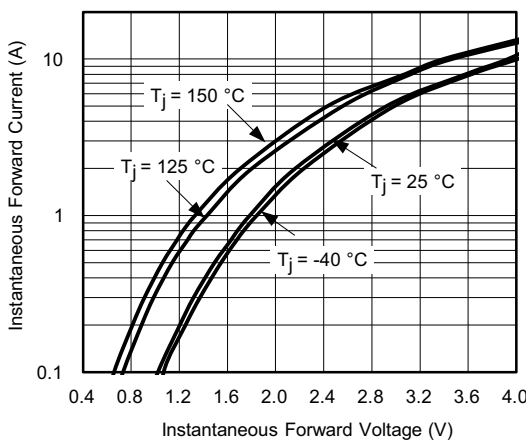


Fig. 3 - Typical Instantaneous Forward Characteristics

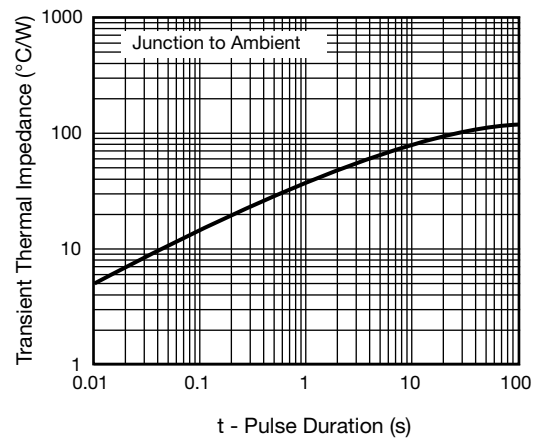
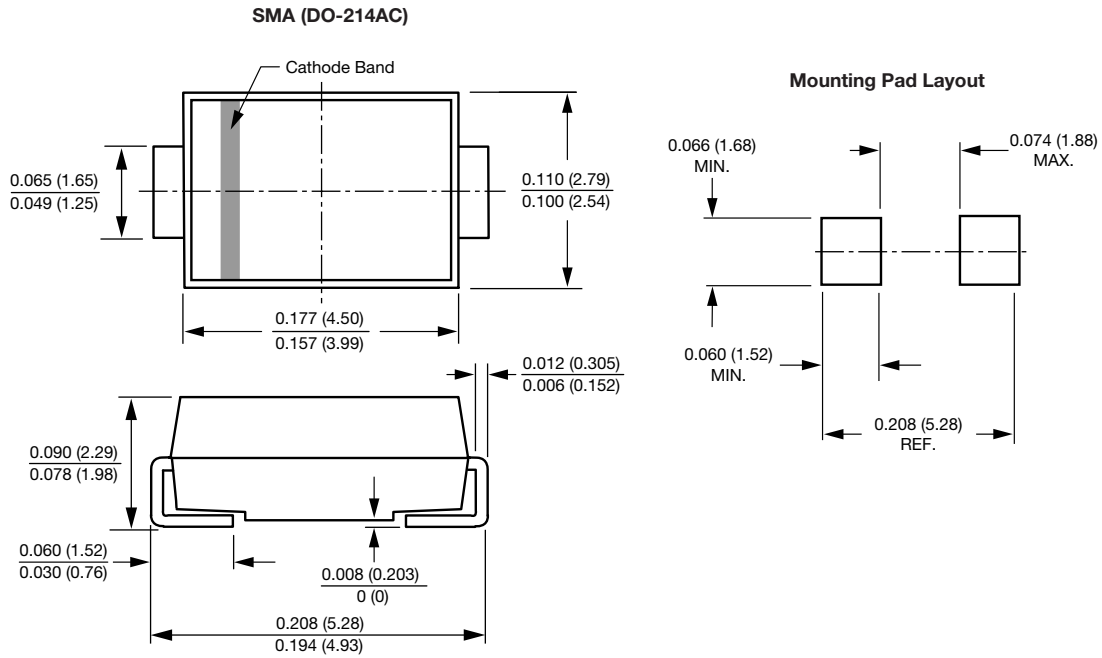


Fig. 6 - Typical Transient Thermal Impedance



**PACKAGE OUTLINE DIMENSIONS** in inches (millimeters)





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