

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

PARAMETER	TEST CONDITIONS		SYMBOL	BYG21K	BYG21M	UNIT
Maximum instantaneous forward voltage	I _F = 1 A	T _J = 25 °C	V _F ⁽¹⁾	1.5		V
	I _F = 1.5 A			1.6		
Maximum reverse current	V _R = V _{RRM}	T _J = 25 °C	I _R	1		μA
		T _J = 100 °C		10		
Maximum reverse recovery time	I _F = 0.5 A, I _R = 1.0 A, I _{rr} = 0.25 A		t _{rr}	120		ns

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	BYG21K	BYG21M	UNIT
Typical thermal resistance, junction to lead, T _L = const.	R _{θJL}	25		°C/W
Typical thermal resistance, junction to ambient	R _{θJA} ⁽¹⁾	150		°C/W
	R _{θJA} ⁽²⁾	125		
	R _{θJA} ⁽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
BYG21K-E3/TR	0.064	TR	1800	7" diameter plastic tape and reel
BYG21K-E3/TR3	0.064	TR3	7500	13" diameter plastic tape and reel
BYG21KHE3/TR ⁽¹⁾	0.064	TR	1800	7" diameter plastic tape and reel
BYG21KHE3/TR3 ⁽¹⁾	0.064	TR3	7500	13" diameter plastic tape and reel

Note

(1) AEC-Q101 qualified

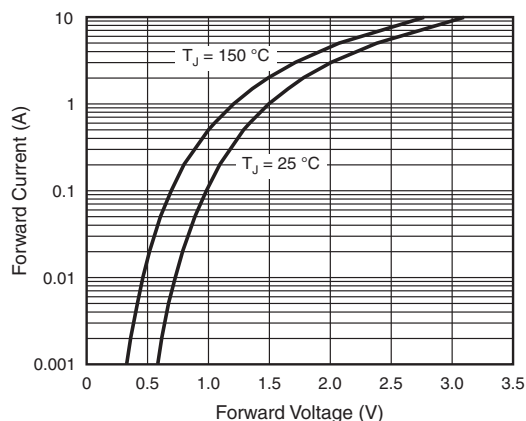
RATINGS AND CHARACTERISTICS CURVES ($T_A = 25\text{ }^{\circ}\text{C}$ unless otherwise noted)

Fig. 1 - Forward Current vs. Forward Voltage

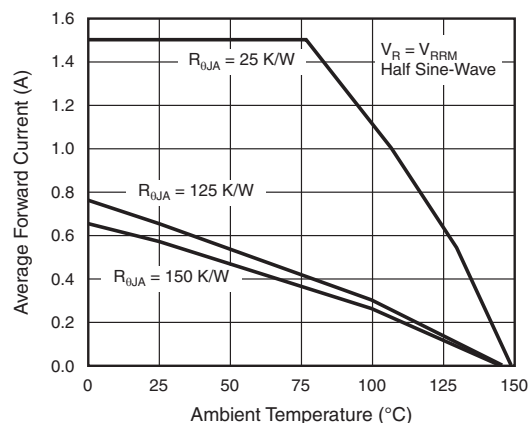


Fig. 2 - Max. Average Forward Current vs. Ambient Temperature

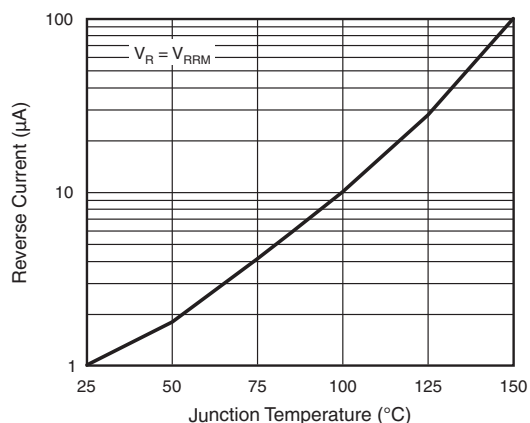


Fig. 3 - Reverse Current vs. Junction Temperature

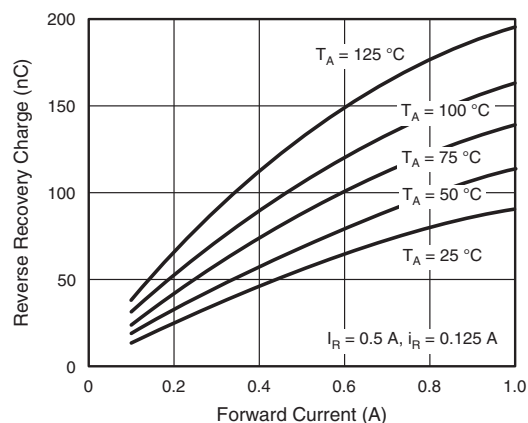


Fig. 6 - Max. Reverse Recovery Charge vs. Forward Current

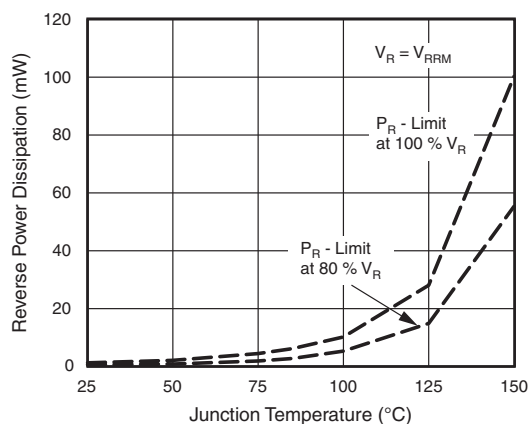


Fig. 4 - Max. Reverse Power Dissipation vs. Junction Temperature

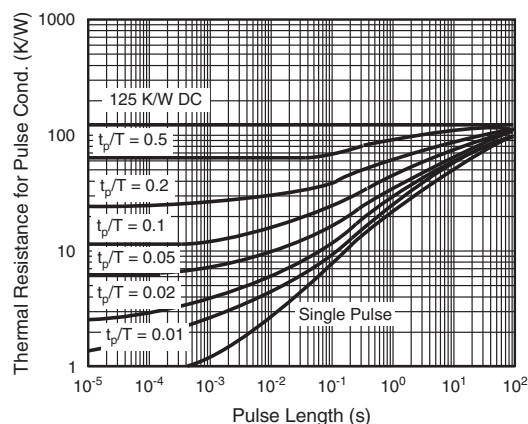


Fig. 7 - Thermal Response

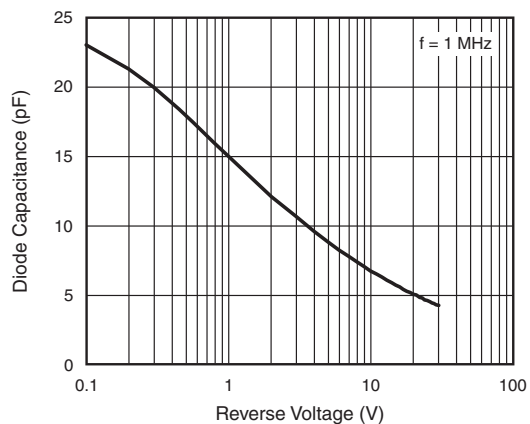
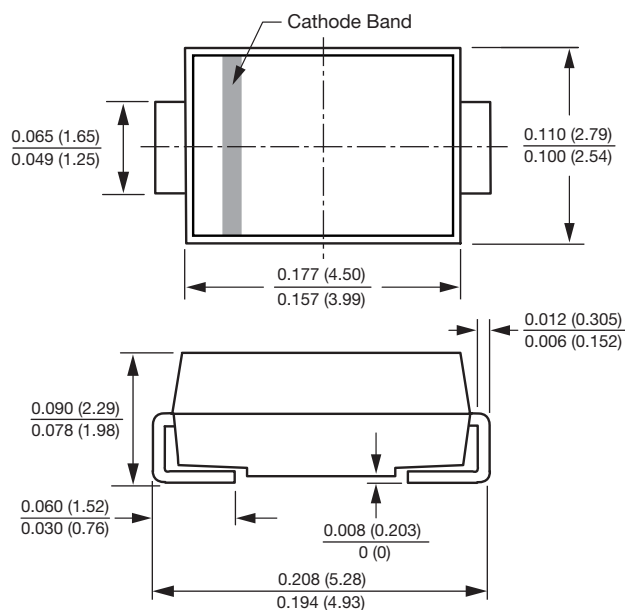


Fig. 5 - Diode Capacitance vs. Reverse Voltage

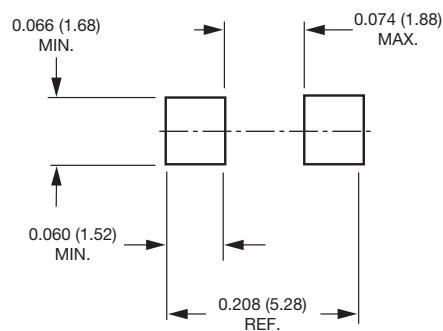


PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

DO-214AC (SMA)



Mounting Pad Layout





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