



DESCRIPTION

The BYG20D_BYG20J are available in SMA package.

MECHANICAL DATA

- Case: SMA molded plastic
- Molding compound, UL flammability classification rating 94V-0
- Terminals: Solder plated, solderable per MIL-STD-202, Method 208
- Polarity: Color band denotes cathode end

ORDERING INFORMATION

Package Type	Part Number
SMA	BYG20D
	BYG20G
	BYG20J
Note	SPQ: 5,000pcs/Reel
AiT provides all RoHS Compliant Products	

FEATURE

- For surface mounted applications
- Ideal for automated placement
- Low forward voltage drops
- High surge current capability

PIN DESCRIPTION



SMA Package



PIN#	DESCRIPTION
1	CATHODE
2	ANODE



ABSOLUTE MAXIMUM RATINGS

T_a = 25°C, unless otherwise specified

V _{RRM} , Repetitive Peak Reverse Voltage	BYG20D	200V
	BYG20G	400V
	BYG20J	600V
V _{RMS} , RMS Reverse Voltage	BYG20D	140V
	BYG20G	280V
	BYG20J	420V
V _{DC} , DC blocking voltage	BYG20D	200V
	BYG20G	400V
	BYG20J	600V
I _{F(AV)} , Maximum Average Forward Output Current		1.5A
I _{FSM} , Peak Forward Surge Current, 8.3ms Single Half-Sine-Wave		30A
R _{θJA} , Typical Thermal Resistance *		70°C/W
R _{θJC} , Typical Thermal Resistance *		25°C/W
R _{θJL} , Typical Thermal Resistance *		30°C/W
T _{STG} , Storage Temperature Range		-55°C ~ + 150°C
T _J , Operating Temperature		-55°C ~ + 150°C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

*Device mounted on PCB with 10 mm x 20 mm x 0.1mm copper pad areas

ELECTRICAL CHARACTERISTICS

T_A=25°C unless otherwise specified.

Parameter	Symbols	Conditions	Min.	Typ.	Max.	Unit	
Maximum Instantaneous Forward Voltage	V _F	I _F = 1A	-	-	1.3	V	
		I _F = 1.5A	-	-	1.4		
Maximum Reverse Current	I _R	Rated V _R	T _A =25°C	-	-	1	μA
			T _A =125°C	-	-	200	
Reverse Recovery Time	t _{rr}	I _F = 0.5A, I _{RM} = 1A I _{R(REC)} = 0.25A	-	-	75	ns	



TYPICAL PERFORMANCE CHARACTERISTICS

Fig 1. Forward Current Derating Curve

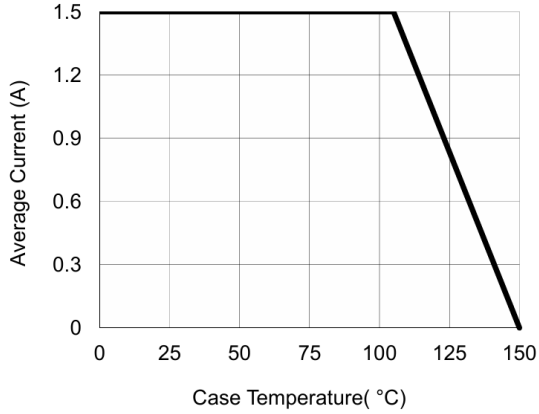


Fig 2. Surge Current Derating Curve

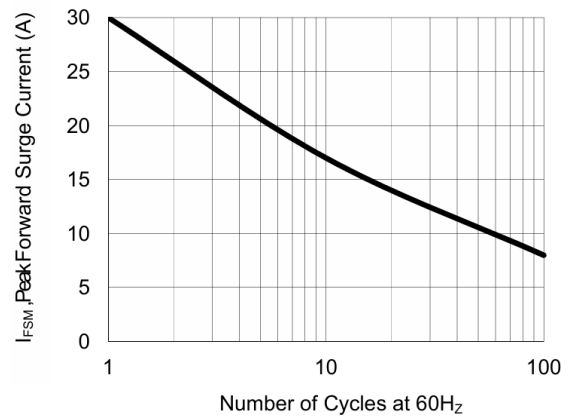


Fig 3. Typical Forward Voltage Characteristics

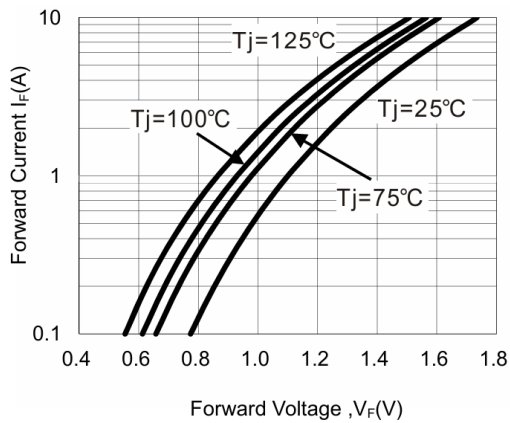
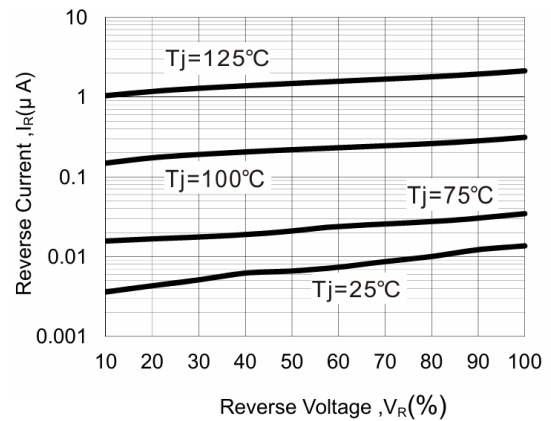


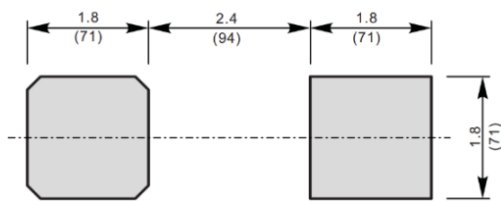
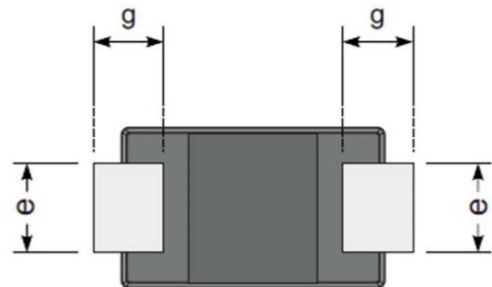
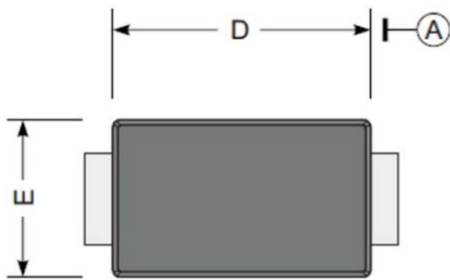
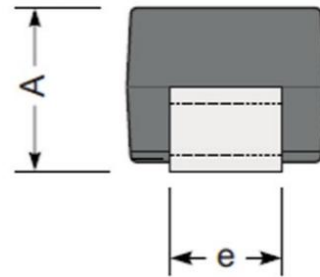
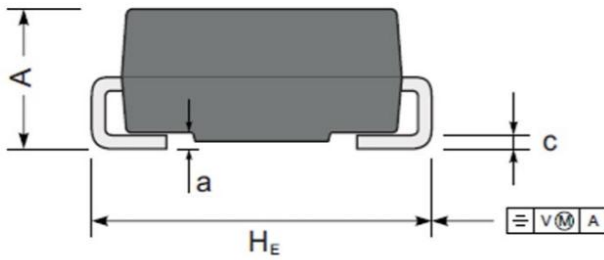
Fig 4. Typical Reverse Characteristics





PACKAGE INFORMATION

Dimension in SMA Package (Unit: mm)



Unit : $\frac{\text{mm}}{\text{mil}}$

The recommended mounting pad size

SYMBOL	MIN	MAX
A	1.900	2.200
a	0.300	
c	0.150	0.310
D	4.000	4.500
E	2.300	2.700
e	1.300	1.600
g	0.900	1.500
H _E	4.700	5.200



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