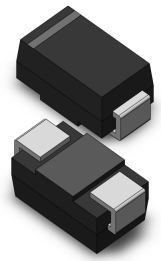
BYG24D - BYG24J

FAST AVALANCHE RECTIFIERS DIODES

VOLTAGE RANGE: 200 - 600V
CURRENT: 1.5 A



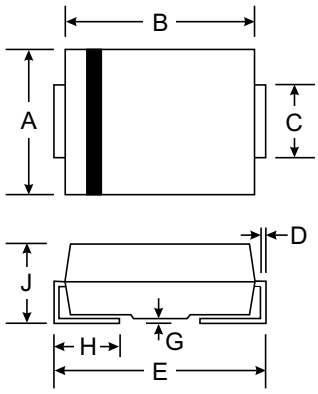
Features

- Glass passivated junction
- Low profile package
- Ideal for automated placement
- Low reverse current
- Soft recovery characteristics
- Fast reverse recovery time

Mechanical Data

- Case: SMA/DO-214AC, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.064 grams (approx.)

RoHS COMPLIANT



SMA(DO-214AC)		
Dim	**Min**	**Max**
A	2.29	2.92
B	4.00	4.60
C	1.27	1.63
D	0.15	0.31
E	4.80	5.59
G	0.10	0.20
H	0.76	1.52
J	2.01	2.62
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

RATING		SYMBOL	BYG24D	BYG24G	BYG24J	UNIT
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	200	400	600	V
Minimum Breakdown Voltage at I_R = 100 µA		$V_{(BR)}$	200	400	600	V
Maximum Average Forward Current		$I_{F(AV)}$	1.5			A
Peak Forward Surge Current 10 ms single half sine wave superimposed on rated load		I_{FSM}	30			A
Maximum Instantaneous Forward Voltage (1)	at I_F = 1 A, Tj = 25 °C	V_F	1.15			V
	at I_F = 1.5 A, Tj = 25 °C		1.25			
Maximum DC Reverse Current	at $V_R = V_{RRM}$, Tj = 25 °C	I_R	1.0			µA
	at $V_R = V_{RRM}$, Tj = 100 °C	$I_{R(H)}$	10			
Maximum Reverse Recovery Time(I_F = 0.5A, I_R = 1.0A, Irr = 0.25A)		Trr	140			ns
Typical Thermal Resistance, Junction to Case		$R_{\Theta JC}$	25			°C/W
Maximum Thermal Resistance, Junction to Ambient (2)		$R_{\Theta JA}$	150			°C/W
Pulse energy in avalanche mode, non repetitive (inductive load switch off) $I_{(BR)R}$ = 1A, Tj = 25 °C		E_R	20			mJ
Operating Junction and Storage Temperature Range		T_J, T_{STG}	- 55 to + 150			°C

Notes :

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

(2) Mounted on epoxy-glass hard tissue 35 µm * 17 mm² cooper area per electrode.

RATING AND CHARACTERISTIC CURVES (BYG24D - BYG24J)

FIG.1 - AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

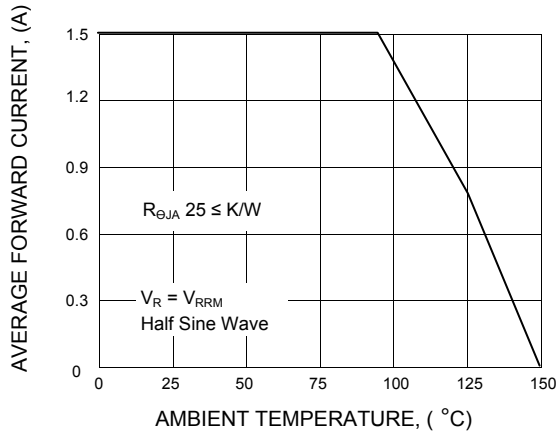


FIG.2 - DIODE CAPACITANCE VS. REVERSE VOLTAGE

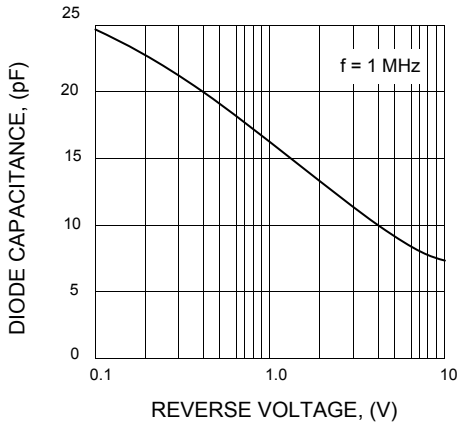


FIG.3 - FORWARD CURRENT VS. FORWARD VOLTAGE

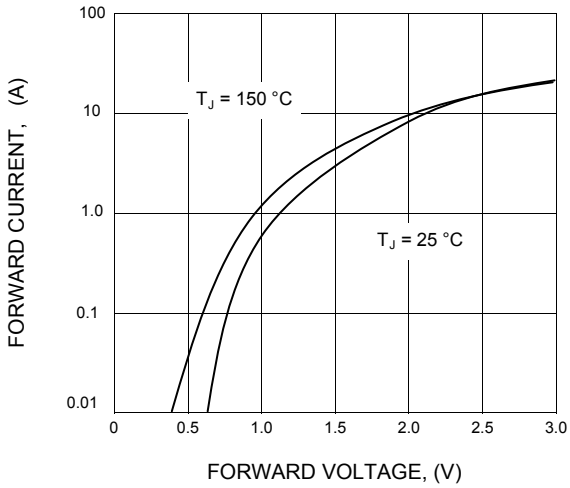


FIG.4 - REVERSE CURRENT VS. JUNCTION TEMPERATURE