

BYG24D - BYG24J

FAST AVALANCHE RECTIFIERS

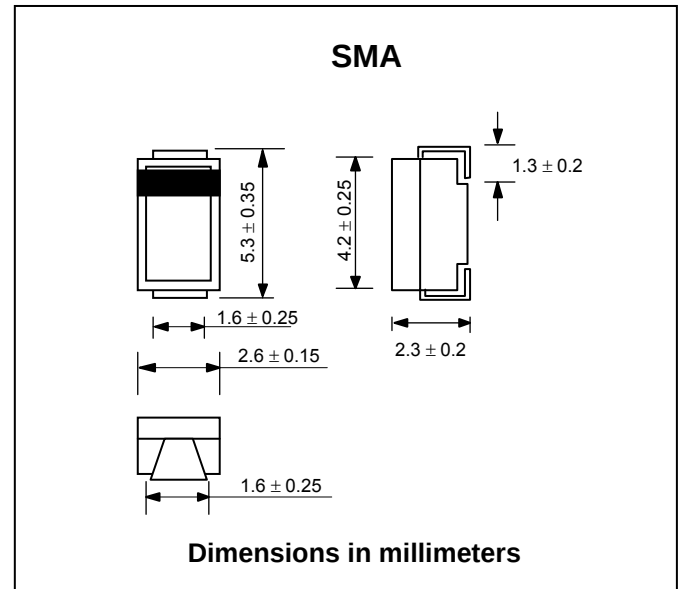
PRV : 200 - 600 Volts
Io : 1.5 Amperes

FEATURES :

- * Glass passivated junction
- * Low profile package
- * Ideal for automated placement
- * Low reverse current
- * Soft recovery characteristics
- * Fast reverse recovery time
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : SMA Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.060 gram (Approximately)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise noted

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, T _j = 25 °C	V _F	1.15			V
at I _F = 1.5 A, T _j = 25 °C		1.25			
Maximum DC Reverse Current at V _R = V _{RRM} , T _j = 25 °C	I _R	1.0			μA
at V _R = V _{RRM} , T _j = 100 °C	I _{R(H)}	10			
Maximum Reverse Recovery Time(I _F = 0.5A, I _R = 1.0A, I _{rr} = 0.25A)	T _{rr}	140			ns
Typical Thermal Resistance, Junction to Case	R _{ΘJC}	25			°C/W
Maximum Thermal Resistance, Junction to Ambient ⁽²⁾	R _{ΘJA}	150			°C/W
Pulse energy in avalanche mode, non repetitive (inductive load switch off) I _{(BR)R} = 1A, T _j = 25 °C	E _R	20			mJ
Operating Junction and Storage Temperature Range	T _J , T _{STG}	- 55 to + 150			°C

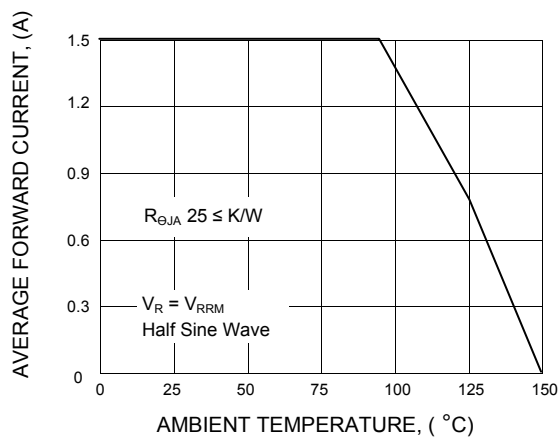
Notes :

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

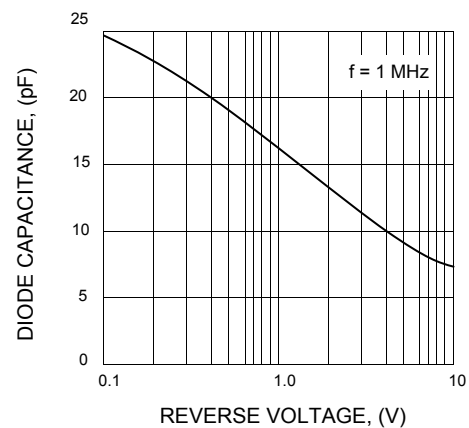
(2) Mounted on epoxy-glass hard tissue 35 μm * 17 mm² cooper area per electrode.

RATING AND CHARACTERISTIC CURVES (BYG24D - BYG24J)

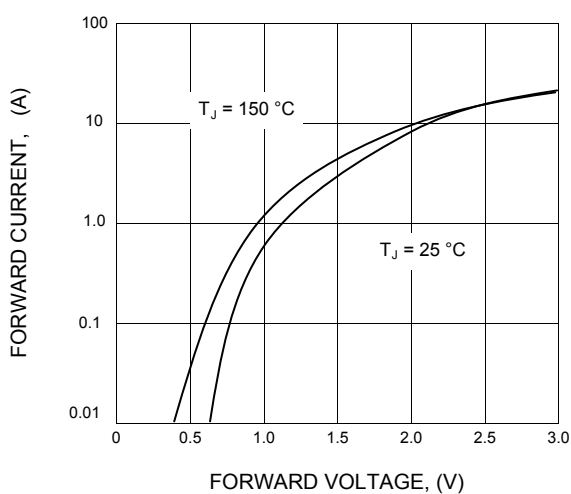
**FIG.1 - AVERAGE FORWARD CURRENT
VS. AMBIENT TEMPERATURE**



**FIG.2 - DIODE CAPACITANCE VS.
REVERSE VOLTAGE**



**FIG.3 - FORWARD CURRENT VS.
FORWARD VOLTAGE**



**FIG.4 - REVERSE CURRENT VS.
JUNCTION TEMPERATURE**

