BYM56C

SINTERED GLASS JUNCTION AVALANCHE RECTIFIER

VOLTAGE：600V **CURRENT: 3.5A**

GULF SEMI

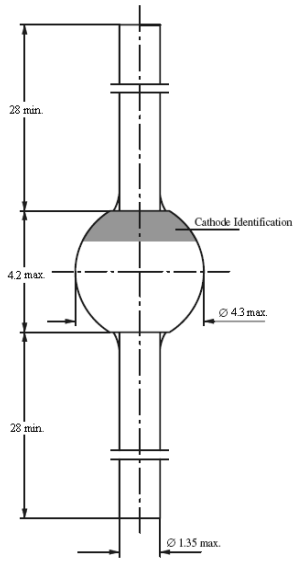
FEATURE

Glass passivated
High maximum operating temperature
Low leakage current
Excellent stability
Guaranteed avalanche energy absorption capability

MECHANICAL DATA

Case: SOD-64 sintered glass case
Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
Polarity: color band denotes cathode end
Mounting position: any

SOD-64



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	BYM56C	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	600	V
Maximum RMS Voltage	V_{RMS}	420	V
Maximum DC blocking Voltage	V_{DC}	600	V
Reverse avalanche breakdown voltage at I_R = 0.1 mA	$V_{(BR)R}$	650min	V
Maximum Average Forward Rectified Current 3/8"lead length at Ttp =60°C	I_{FAV}	3.5	A
Non-repetitive Peak Forward Surge Current at Tp=10ms half sinewave	I_{FSM}	80	A
Maximum Forward Voltage at 3A and 25℃	V_F	1.15	V
Non-repetitive peak reverse avalanche energy (Note 1)	E_{RSM}	20	mJ
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =165°C	I_R	1.0 150.0	μA
Diode Capacitance (Note 2)	C_d	90	pF
Typical Thermal Resistance (Note 3)	$R_{th(ja)}$	75	°C /W
Storage and Operating Junction Temperature	Tstg, Tj	-65 to +175	°C

Note:
1. L=120mH; Tj=Tjmax prior to surge; inductive load switched off
2. Measured at 1.0 MHz and applied reverse voltage of 0Vdc
3. Device mounted on an epoxy-glass printed-circuit board, 1.5mm thick

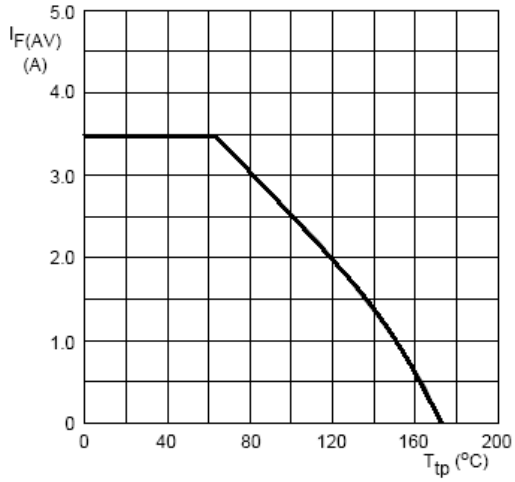


Fig.1 Maximum permissible average forward current as a function of tie-point temperature (including losses due to reverse leakage).

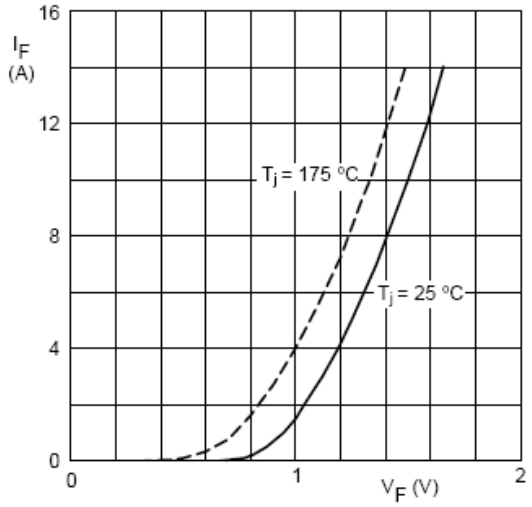


Fig.2 Forward current as a function of forward voltage; maximum values.

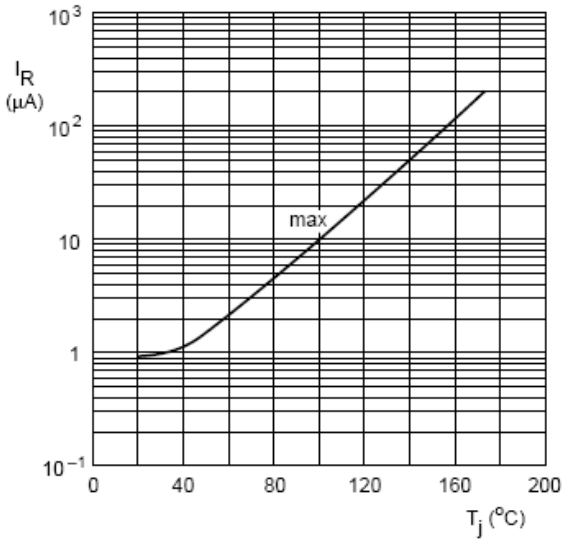


Fig.3 Reverse current as a function of junction temperature; maximum values.

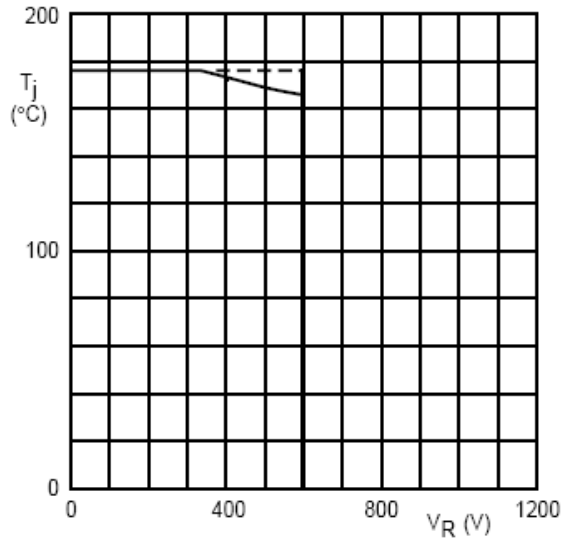


Fig.4 Maximum permissible junction temperature as a function of reverse voltage.

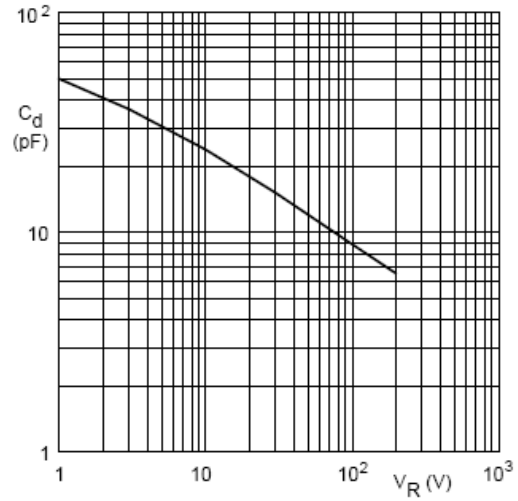


Fig.5 Diode capacitance as a function of reverse voltage; typical values.