BYM36E

SINTERED GLASS JUNCTION
FAST AVALANCHE RECTIFIER

VOLTAGE：1000V **CURRENT: 3.0A**

GULF SEMI

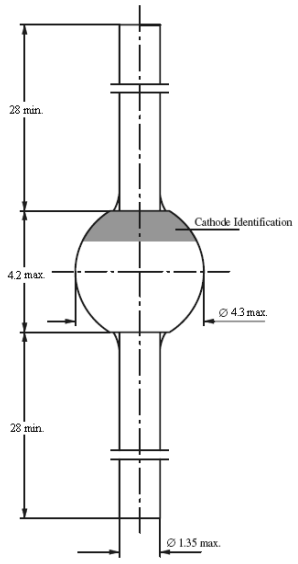
FEATURE

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	BYM36E	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS Voltage	V_{RMS}	700	V
Maximum DC blocking Voltage	V_{DC}	1000	V
Reverse avalanche breakdown voltage at I_R = 0.1 mA	$V_{(BR)R}$	1100min	V
Maximum Average Forward Rectified Current 3/8"lead length at Ttp =55°C	I_{FAV}	3.0	A
Peak Forward Surge Current at Tp=10ms half sinewave	I_{FSM}	65	A
Maximum Forward Voltage at rated Forward Current	V_F	1.78	V
Non-repetitive peak reverse avalanche energy (Note 1)	E_{RSM}	10	mJ
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =165°C	I_R	5.0 150.0	μA μA
Maximum Reverse Recovery Time (Note 2)	Trr	150	nS
Diode Capacitance (Note 3)	C_d	75	pF
Typical Thermal Resistance (Note 4)	$R_{th(ja)}$	75	°C /W
Storage and Operating Junction Temperature	Tstg, Tj	-65 to +175	°C

Note:
1. I_R=400mA; Tj=Tjmax prior to surge; inductive load switched off
2. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
3. Measured at 1.0 MHz and applied reverse voltage of 0Vdc
4. Device mounted on an epoxy-glass printed-circuit board, 1.5mm thick

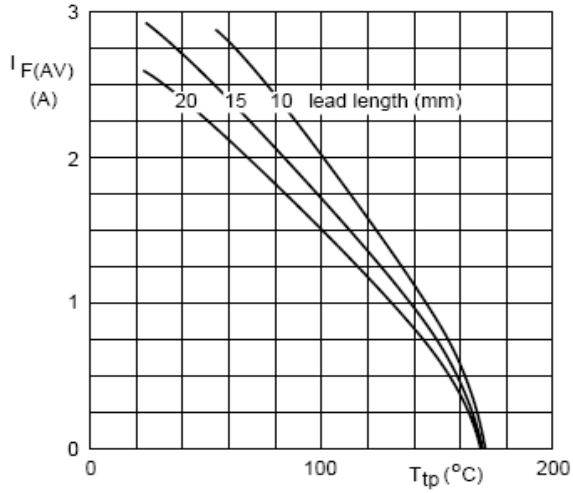
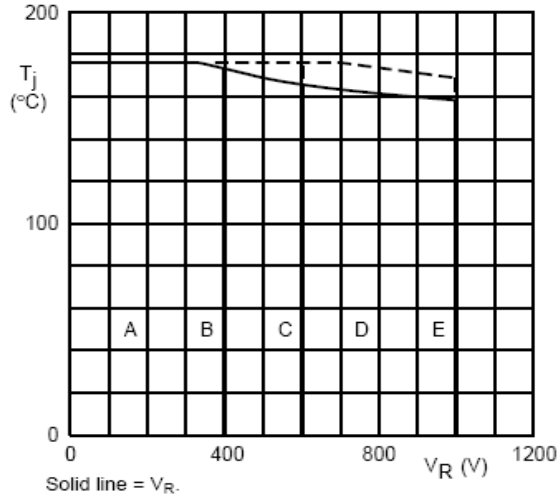
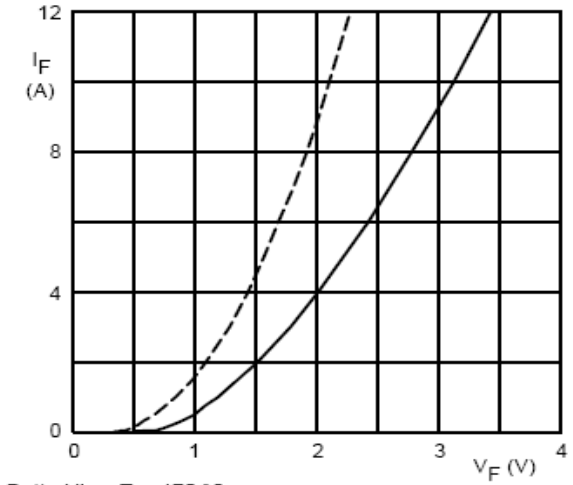


Fig.1 Maximum average forward current as a function of tie-point temperature (including losses due to reverse leakage).



Solid line = V_R.
Dotted line = V_{RRM}; $\delta = 0.5$.

Fig.2 Maximum permissible junction temperature as a function of reverse voltage.



Dotted line: T_j = 175 °C.
Solid line: T_j = 25 °C.

Fig.3 Forward current as a function of forward voltage; maximum values.

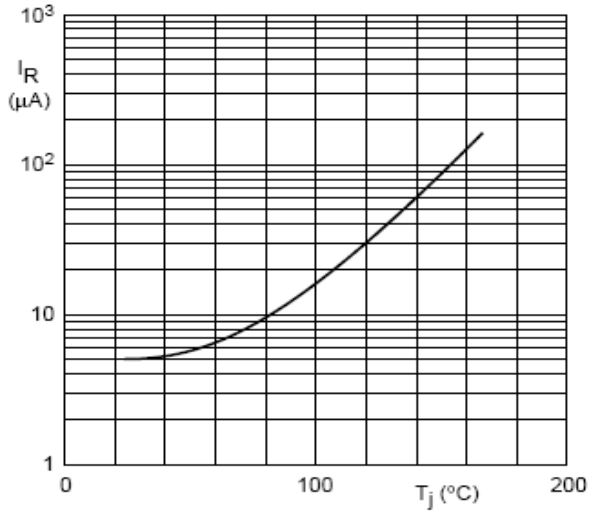
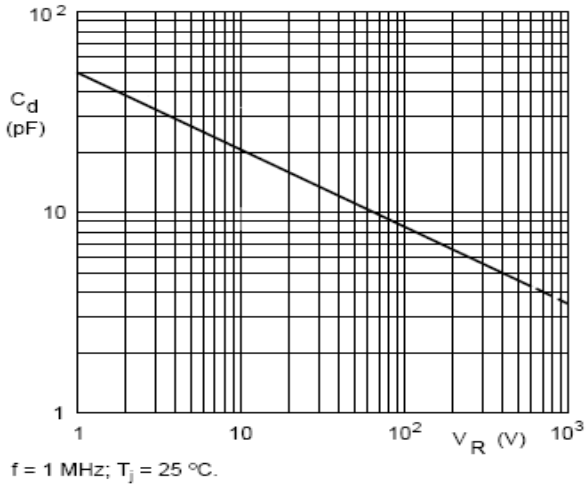


Fig.4 Reverse current as a function of junction temperature; maximum values.



f = 1 MHz; T_j = 25 °C.

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