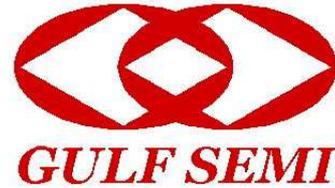


BYW36

SINTERED GLASS JUNCTION FAST AVALANCHE RECTIFIER

VOLTAGE: 600V

CURRENT: 2.0A



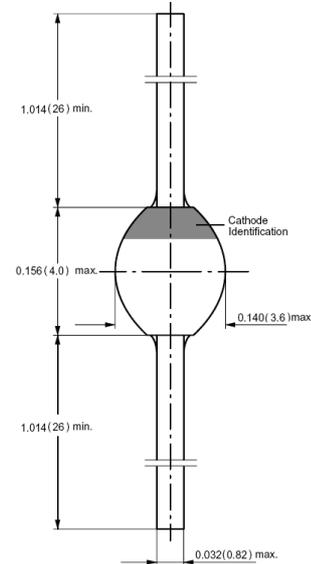
FEATURE

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

MECHANICAL DATA

Case: SOD-57 sintered glass case
Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
Polarity: color band denotes cathode end
Mounting position: any

SOD-57



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	BYW36	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
Maximum Average Forward Rectified Current 3/8" lead length at $T_a=55^\circ\text{C}$	I_{FAV}	2.0	A
Peak Forward Surge Current at $T_p=10\text{ms}$ half sine wave	I_{FSM}	40	A
Maximum Forward Voltage at Forward Current 2A	V_F	1.2	V
Maximum full load Reverse Current $T_a=25^\circ\text{C}$ Full cycle average, 0.375" (9.5mm) lead length $T_a=100^\circ\text{C}$	I_R	5.0 50.0	μA
Maximum Reverse Recovery Time (Note1)	T_{rr}	200	nS
Typical Junction Capacitance (Note2)	C_j	15	pF
Typical Thermal Resistance (Note3)	$R_{th(ja)}$	55	$^\circ\text{C/W}$
Storage and Operating Junction Temperature	T_{stg}, T_j	-65 to +175	$^\circ\text{C}$

Note:

1. Reverse Recovery Condition $I_f=0.5\text{A}$, $I_r=1.0\text{A}$, $I_{rr}=0.25\text{A}$
2. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts
3. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

RATINGS AND CHARACTERISTIC CURVES BYW36

FIG. 1 - FORWARD CURRENT DERATING CURVE

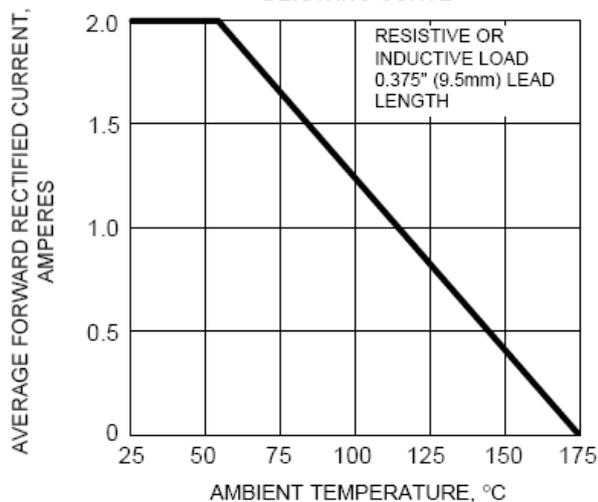


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

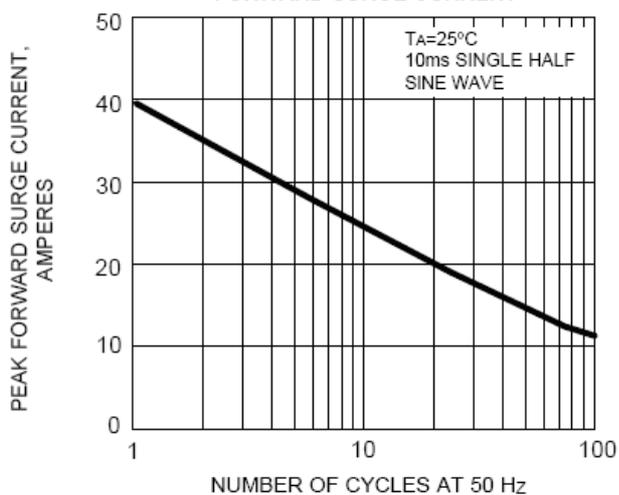


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

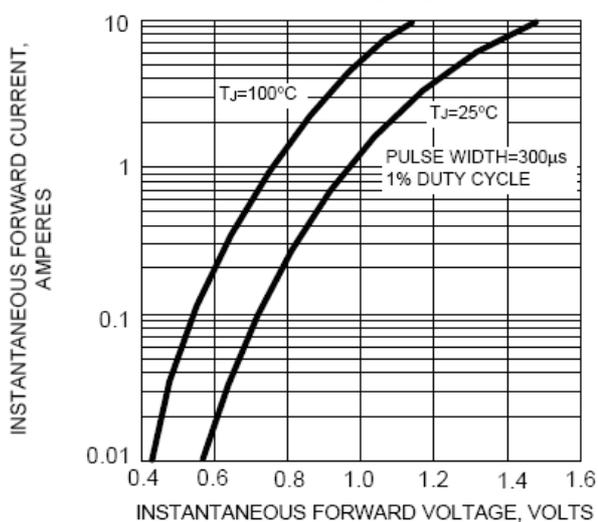


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

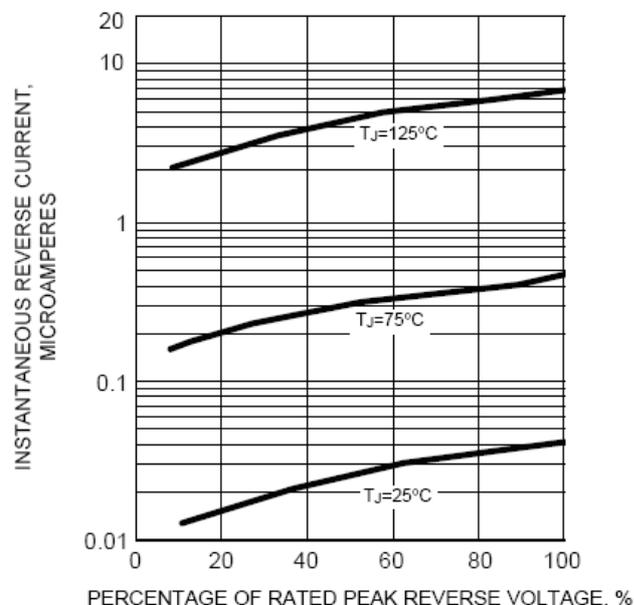


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

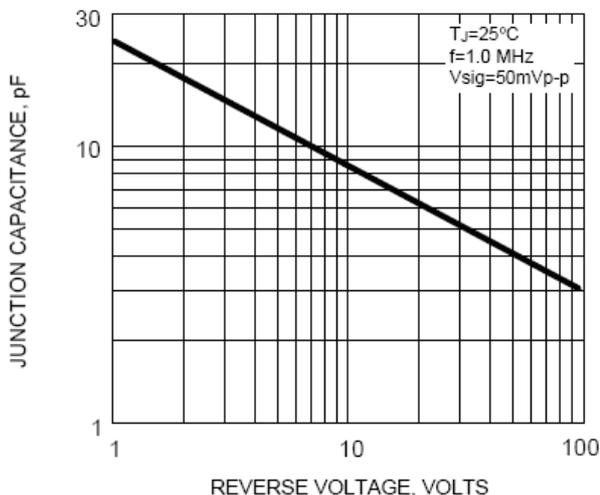


FIG. 6 - TYPICAL RECTIFICATION EFFICIENCY

