ER502N

ULTRAFAST EFFICIENT GLASS PASSIVATED RECTIFIER

VOLTAGE: 200V **CURRENT: 5.0A**

GULF SEMI

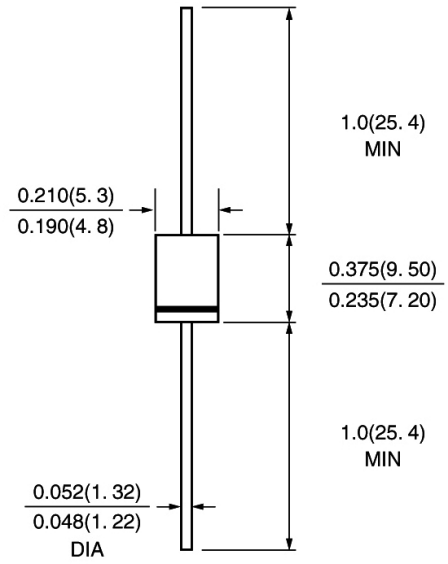
FEATURE

Low power loss
High surge capability
Ultra-fast recovery time for high efficiency
Glass passivated chip junction
High temperature soldering guaranteed
250°C/10sec/0.375”lead length at 5 lbs tension

MECHANICAL DATA

Terminal: Plated axial leads solderable per
MIL-STD 202E, method 208C
Case: Molded with UL-94 Class V-0 recognized Flame
Retardant Epoxy
Polarity: color band denotes cathode
Mounting position: any

DO-201AD



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	ER502N	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	200	V
Maximum RMS Voltage	Vrms	140	V
Maximum DC blocking Voltage	Vdc	200	V
Maximum Average Forward Rectified Current 3/8”lead length at Ta =55°C	If(av)	5.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	150.0	A
Maximum Forward Voltage at Forward current 5A Peak	Vf	1.0	V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	Ir	10.0 100.0	μA
Maximum Reverse Recovery Time (Note 1)	Trr	35	nS
Typical Junction Capacitance (Note 2)	Cj	65	pF
Storage and Operating Junction Temperature	Tstg,Tj	-55 to +150	°C

Note:

1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc

RATINGS AND CHARACTERISTIC CURVES ER502N

FIG.1- FORWARD CURRENT DERATING CURVE

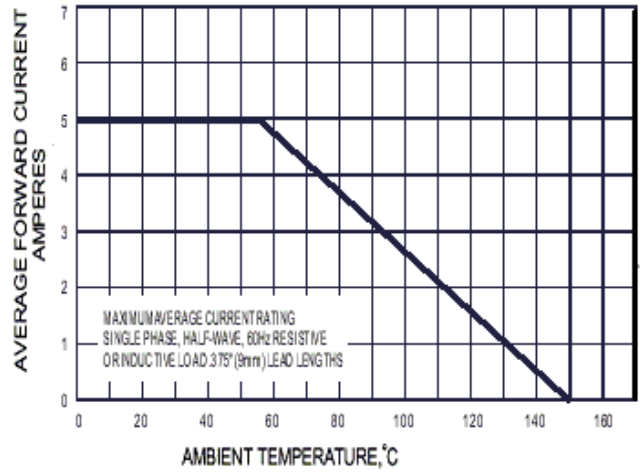


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

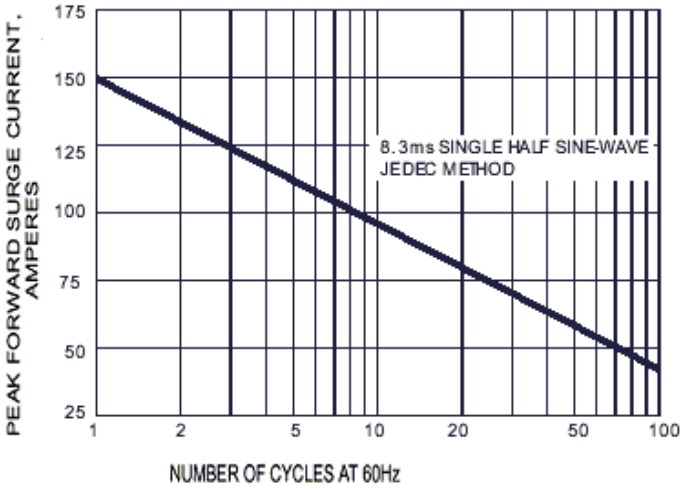


FIG.3- TYPICAL REVERSE CHARACTERISTICS

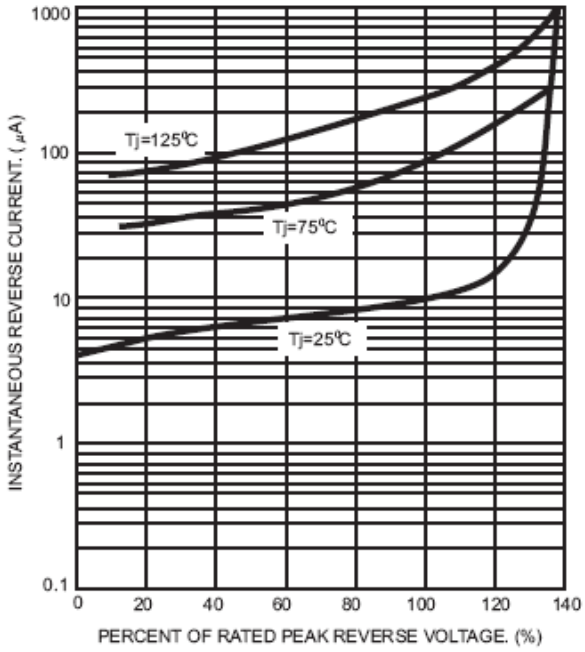


FIG.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

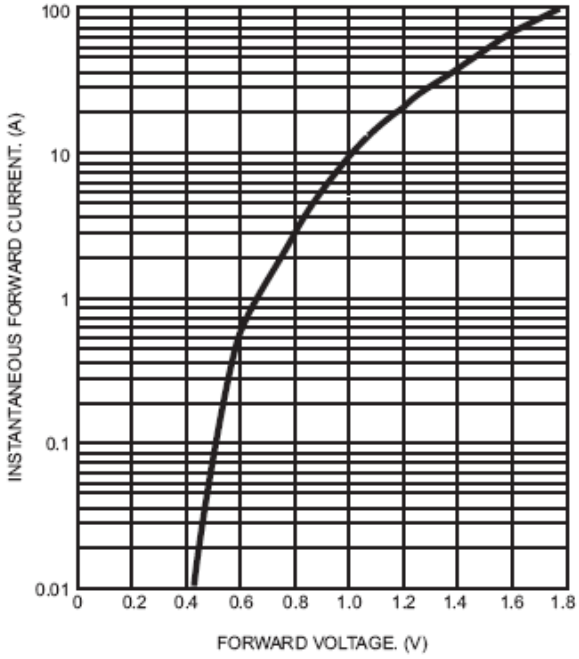


FIG.5- TYPICAL JUNCTION CAPACITANCE