PANJIT SEMI CONDUCTOR

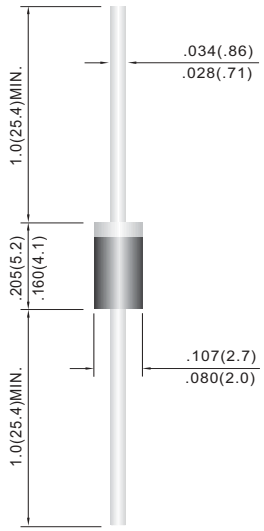
DATA SHEET

ER100 thru ER106

SUPERFAST RECOVERY RECTIFIERS

VOLTAGE 50 to 600 Volts **CURRENT** 1.0 Amperes

DO-41 Unit: inch(mm)



FEATURES

- Plastic package has Underwriters Laboratories Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Superfast recovery times-epitaxial construction.
- Low forward voltage, high current capability.
- Exceeds environmental standards of MIL-S-19500/228.
- Hermetically sealed.
- Low leakage.
- High surge capability.
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

MECHANICAL DATA

Case: Molded plastic, DO-41.

Terminals: Axial leads, solderable to MIL-STD-202G, Method 208.

Polarity: Color Band denotes cathode end.

Mounting Position: Any

Weight: 0.012 ounce, 0.3 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Resistive or inductive load, 60Hz.

PARAMETER	SYMBOL	ER100	ER101	ER101A	ER102	ER103	ER104	ER106	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	600	V
Maximum Average Forward Current .375"(9.5mm) lead length at T_A=55°C	I_{AV}	1.0							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	30							A
Maximum Forward Voltage at 1.0A	V_F	0.95				1.25		1.7	V
Maximum DC Reverse Current TA=25°C at Rated DC Blocking Voltage TA=100°C	I_R	5.0 150							uA
Typical Junction capacitance (Note 2)	C_J	17							pF
Maximum Reverse Recovery Time (Note 1)	T_{RR}	35							ns
Typical Thermal Resistance	RθJA	50							°C / W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 TO +150							°C

NOTES:

1. Reverse Recovery Test Conditions: I_F=.5A, I_R=1A, Irr=.25A
2. Measured at 1 MHz and applied reverse voltage of 4.0 VDC

RATING AND CHARACTERISTIC CURVES

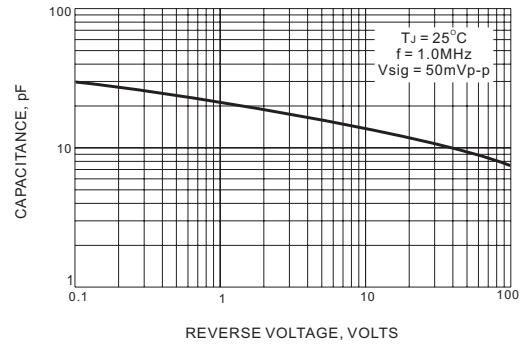


FIG.1 TYPICAL JUNCTION CAPACITANCE

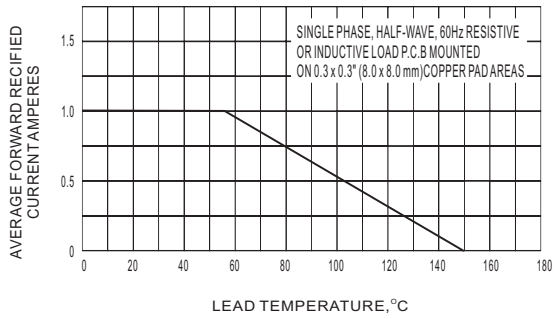


FIG.2 MAXIMUM AVERAGE FORWARD CURRENT DERATING

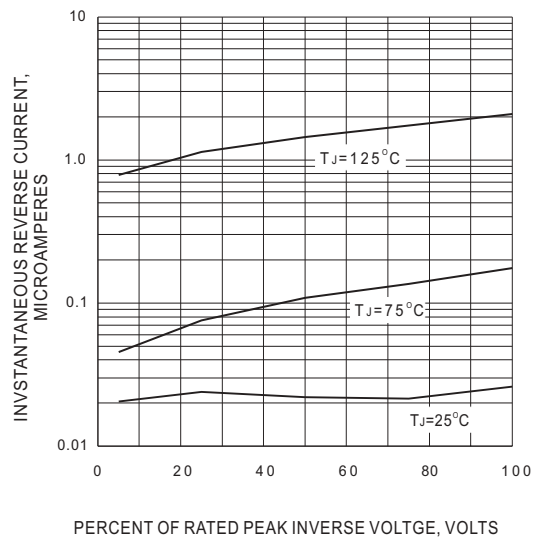


FIG.3 TYPICAL REVERSE CHARACTERISTICS

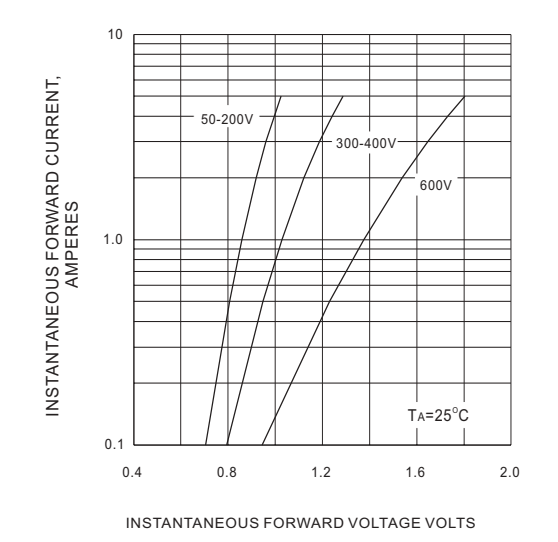


FIG.4 TYPICAL FORWARD CHARACTERISTICS

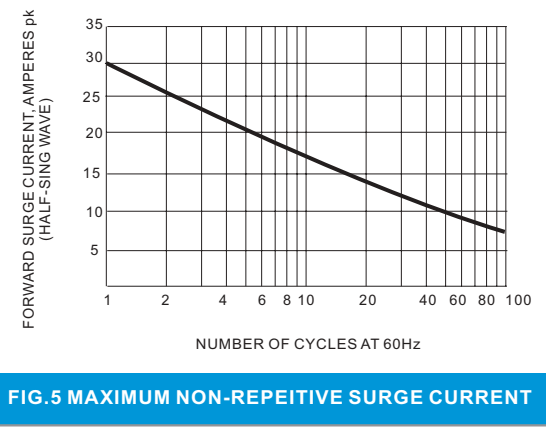


FIG.5 MAXIMUM NON-REPEITIVE SURGE CURRENT