VISHAY MAS 威世马来
GENERAL SEMICONDUCTOR

SUPERFAST RECOVERY RECTIFIERS

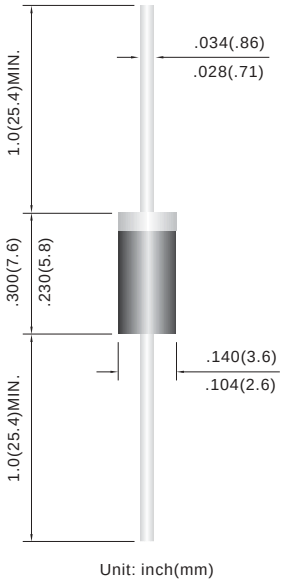
ER200 - ER208

Vishaymas General Semiconductor

FEATURES

- 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.
- Plastic package has Underwriters Laboratories Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

DO-15



Unit: inch(mm)

MECHANICAL DATA

Case: Molded plastic, DO-15
Terminals: Axial leads, solderable to MIL-STD-202G,Method 208
Polarity: Color Band denotes cathode end
Mounting Position: Any
Weight: 0.015 ounce, 0.4 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature uniess otherwies specified. Single phase half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

PARAMETER	SYMBOL	ER200	ER201	ER201A	ER202	ER203	ER204	ER206	ER206A	ER208	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	600	700	800	V
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	420	490	560	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	600	700	800	V
Maximum Average Forward Current .375"(9.5mm) lead length at T_A=55°C	$I_{F(AV)}$	2.0									A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	50									A
Maximum Forward Voltage at 2.0A DC	V_F	0.95				1.25		1.70	2.0	2.5	V
Maximum DC Reverse Current at T_J=25°C Rated DC Blocking Voltage T_J=125°C	I_R	1.0 300									μA
Maximum Reverse Recovery Time (Note1)	t_{rr}	35									ns
Typical Junction capacitance (Note2)	C_J	35									pF
Typical Junction Resistance (Note3)	$R_{\theta JA}$	20									°C/ W
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to +150									°C

NOTES:1. Reverse Recovery Test Conditions: I_F=.5A, I_R=1A, I_{rr}=.25A
2. Measured at 1 MHz and applied reverse voltage of 4.0 VDC
3. Thermal resistance from junction to ambient and from junction to lead length 0.375"(9.5mm) P.C.B. mounted

RATING AND CHARACTERISTIC CURVES

Vishaymas General Semiconductor

FIG.1 MAXIMUM AVERAGE FOR WARD CURREN TRATING

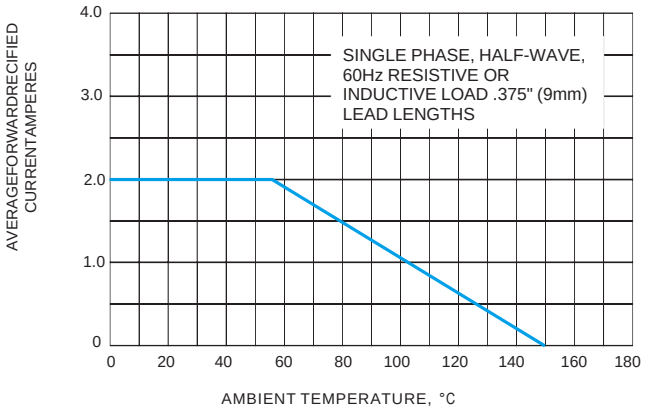


FIG.2 MAX I MUMNON-REPEITIVESURGECURRENT

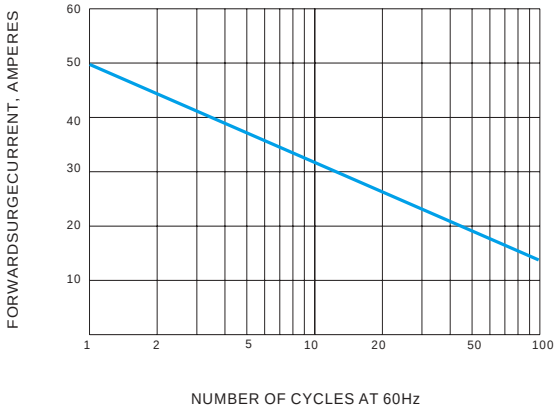


FIG.3 TYP ICALREVERSECHARACTERISTICS

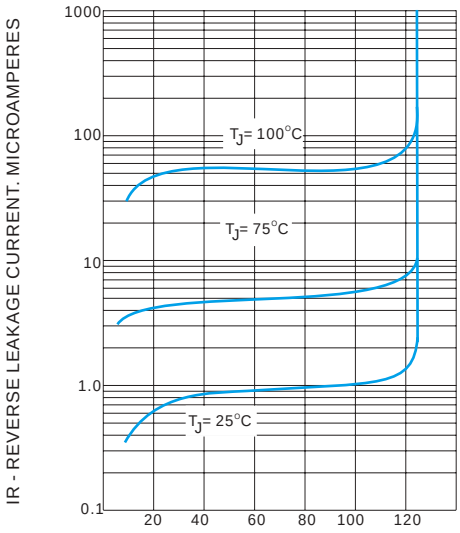


FIG.4 TYPICAL FORWARD CHARACTERISTICS

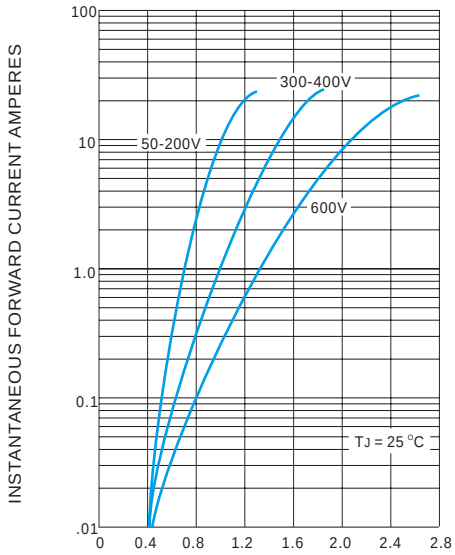


FIG.5 TYPICAL JUNCTION CAPACITANCE