Elektronische Bauelemente

HER101G THRU HER107G

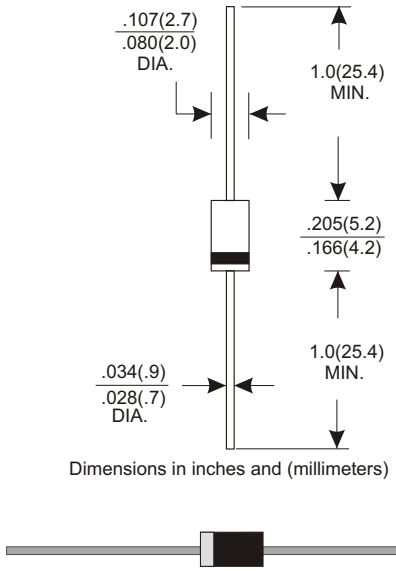
VOLTAGE 50V ~ 1000V

1.0 AMP Glass Passivated High Efficiency Rectifier

RoHS Compliant Product

A suffix of "-C" specifies halogen-free.

DO-41



Dimensions in inches and (millimeters)

FEATURES

- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- High Speed Switching

MECHANICAL DATA

- Case: Molded Plastic
- Epoxy: UL 94V-0 Rate Flame Retardant
- Lead: Axial Lead, Solder Able per MIL-STD-202, Method 208 Guaranteed
- Polarity: Color Band Denotes Cathode End
- Mounting Position: Any
- Weight: 0.34 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Tamb = 25 °C unless otherwise specified
Single phase half-wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%)

Parameter	HER101G	HER102G	HER103G	HER104G	HER105G	HER106G	HER107G	Units
Max. recurrent peak reverse voltage	50	100	200	400	600	800	1000	V
Max. RMS voltage	35	70	140	280	420	560	700	V
Max. DC blocking voltage	50	100	200	400	600	800	1000	V
Max. avg. forward rectified current, .375" (9.5mm) lead length at Ta = 55 °C	1.0							A
Peak forward surge current, 8.3 ms single-half sine-wave superimposed on rated load (JEDEC method)	30							A
Max. instantaneous forward voltage at 1.0A	1.0			1.3	1.7			V
Max. DC reverse current Ta = 25 °C at rated DC blocking voltage Ta =100 °C	5.0 100							μA
Max. reverse recovery time (Note 1)	50				75			ns
Typical junction capacitance (Note 2)	20				15			pF
Operating temperature range T_J	-65~+150							°C
Storage temperature range T_{STG}	-65~+150							°C

Notes:
1. Reverse Recovery Time Test condition: I_F = 0.5 A, I_R = 1.0 A, I_{RR} = 0.25 A
2. Measured at 1 MHz and applied reverse voltage of 4.0V D.C.

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●RATING AND CHARACTERISTIC CURVES (HER101G THRU HER107G)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

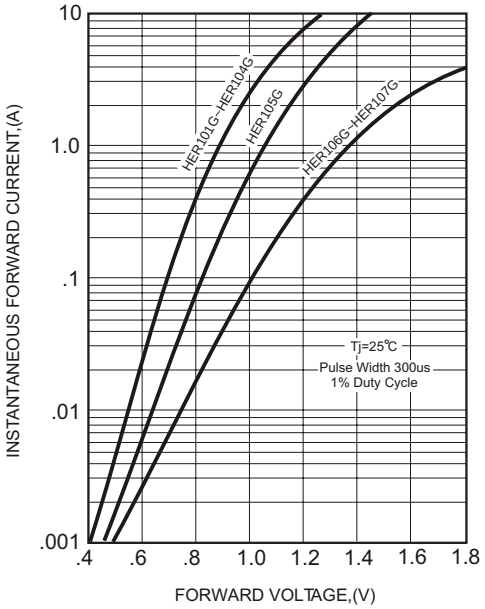


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

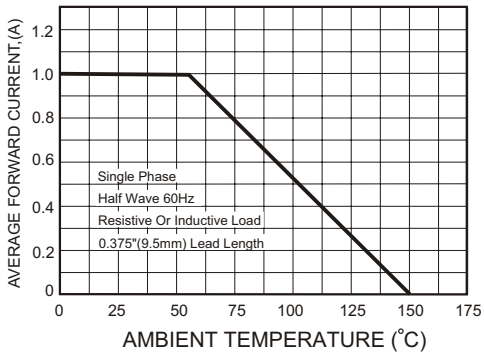
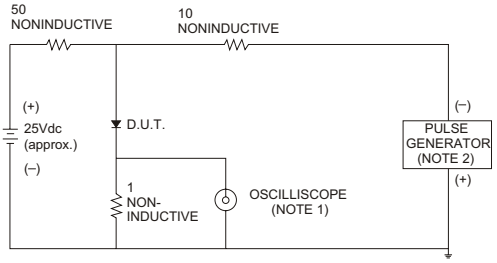


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.

2. Rise Time= 10ns max., Source Impedance= 50 ohms.

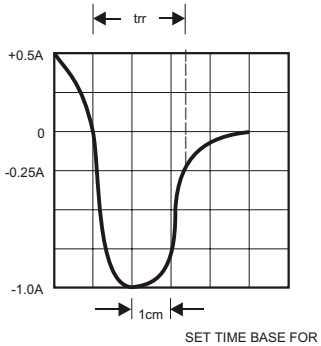


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

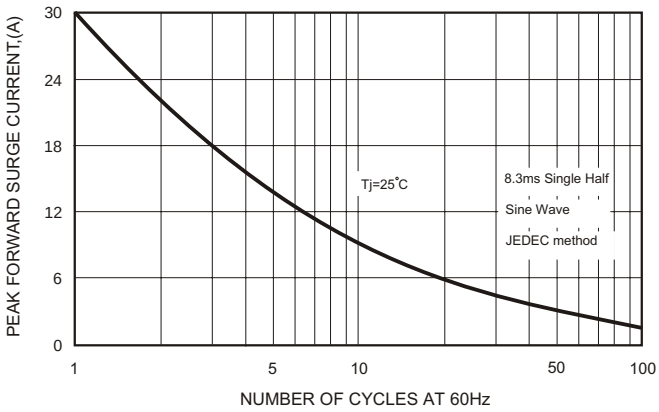


FIG.5-TYPICAL JUNCTION CAPACITANCE

