



FEATURES

- * Low power loss, high efficiency
- * Low leakage
- * Low forward voltage drop
- * High current capability
- * High speed switching
- * High surge capability
- * High reliability
- * RoHS product for packing code suffix "G"
- Halogen free product for packing code suffix "H"

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-O rate flame retardant
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.4 gram

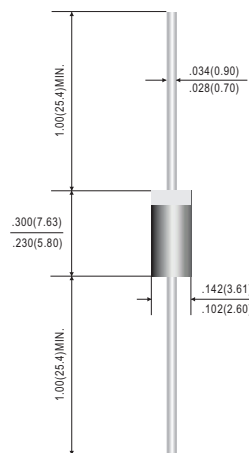
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

DO - 15 PACKAGE



Dimensions in inches and (millimeters)

RATINGS	SYMBOL	HER201	HER202	HER203	HER204	HER205	HER205P	HER206	HER207	HER208	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	300	400	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	210	280	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	300	400	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at TA= 50°C	Io	2.0									Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	60									Amps
Typical Junction Capacitance (Note 2)	CJ	30						20			pF
Operating and Storage Temperature Range	TJ, TSTG	-65 to + 150									°C
Typical Thermal resistance	RθJA / RθJC	40 / 10									°C/W

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	HER201	HER202	HER203	HER204	HER205	HER205P	HER206	HER207	HER208	UNITS
Maximum Instantaneous Forward Voltage at 2.0A DC	V _F	1.0			1.3	1.0	1.70				Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage T _A = 25°C	I _R	5.0									uAmps
Maximum Full Load Reverse Current Average, Full Cycle .375" (9.5mm) lead length at T _L = 55°C		100									uAmps
Maximum Reverse Recovery Time (Note 1)	t _{rr}	50						75			nSec

NOTES : 1. Test Conditions: IF = 0.5A, IR = 1.0A, IRR = 0.25A

2. Measured at 1 MHz and applied reverse voltage of 4.0 volts

RATING AND CHARACTERISTIC CURVES

FIG. 1 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

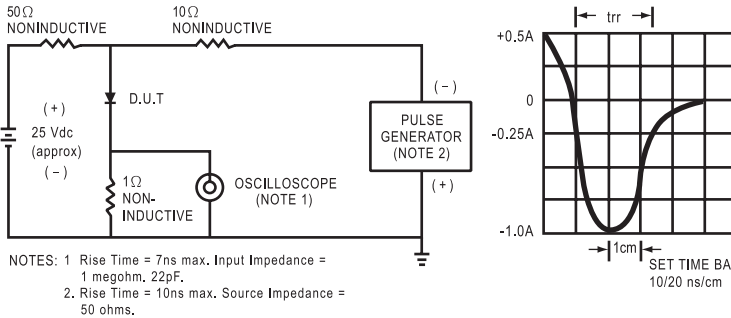


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

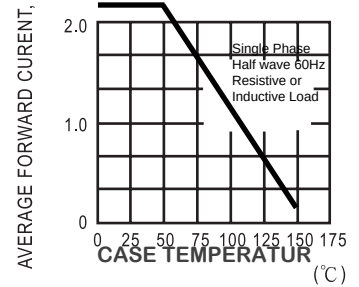


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

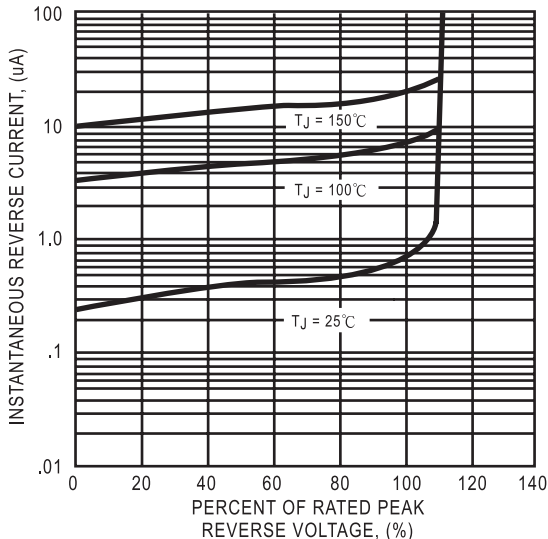


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

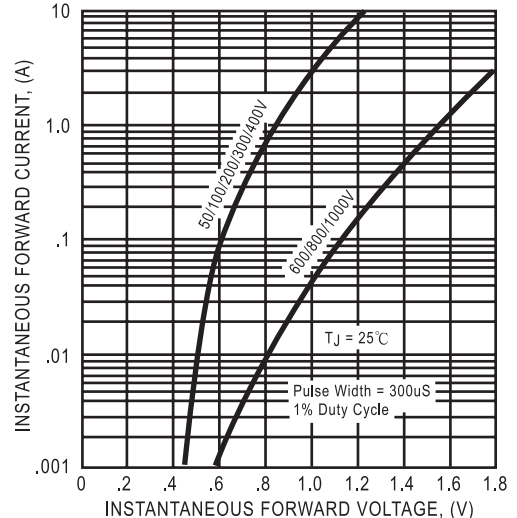


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

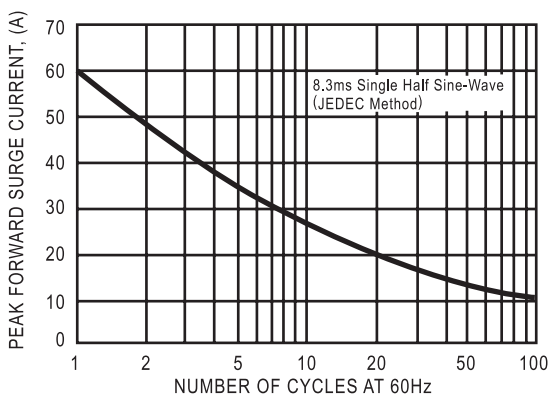


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

