

HER151 THRU HER158

HIGH EFFICIENCY RECTIFIERS

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 2.0 Ampere

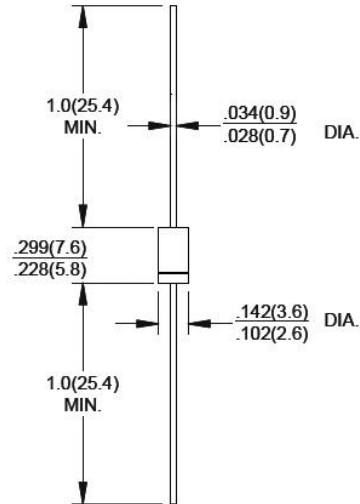
FEATURES

- ◆ High speed switching
 - ◆ Low forward voltage drop
 - ◆ Low leakage current
 - ◆ High forward surge capability
 - ◆ High reliability
 - ◆ High temperature soldering guaranteed
- 260°C/10 seconds, 0.375" (9.5mm) lead length at 5 lbs(2.3kg) tension

Mechanical Data

- ◆ Case: Transfer molded plastic
- ◆ Epoxy: UL94V-0 rate flame retardant
- ◆ Polarity: Color band denotes cathode end
- ◆ Lead: Plated axial lead, solderable per MIL-STD-202E method 208C
- ◆ Mounting position: Any

DO-15



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	HER 151	HER 152	HER 153	HER 154	HER 155	HER 156	HER 157	HER 158	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	300	400	600	800	1000	VOLTS
Maximum RMS Voltage	V _{RMS}	35	70	140	210	280	420	560	700	VOLTS
Maximum DC Blocking Voltage	V _{DC}	50	100	200	300	400	600	800	1000	VOLTS
Maximum average forward rectified current at T _A =55°C	I _(AV)	2.0								Amp
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	50								Amps
Maximum instantaneous forward voltage at 2.0A	V _F	1.0		1.3		1.70			VOLTS	
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _A = 25°C	5.0								uA
	T _A = 100°C	100								
Maximum reverse recovery time (NOTE 1)	T _{RR}	50				75				nS
Typical Junction Capacitance (Note 2)	C _J	30				20				pF
Typical Thermal Resistance (Note 3)	R _{θJA}	50								°C/W
Operating and storage temperature range	T _J , T _{STG}	-55 to +150								°C

Note: 1. Reverse recovery condition I_f=0.5A, I_r=1.0A, I_{rr}=0.25A.

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

3. Thermal resistance from junction to ambient at 0.375"(9.5mm) lead length, P.C.B. mounted.

HER151 THRU HER158

HIGH EFFICIENCY RECTIFIERS

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 2.0 Ampere

RATING AND CHARACTERISTIC CURVES HER151 THRU HER158

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

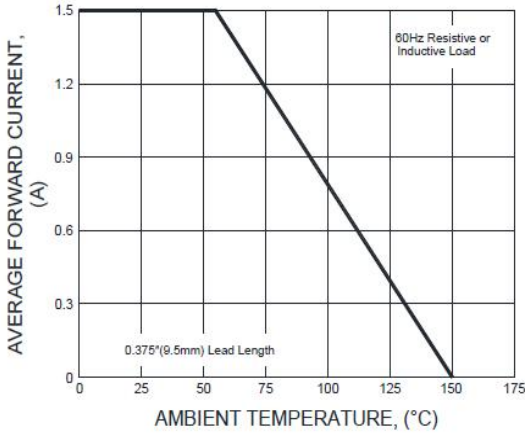


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

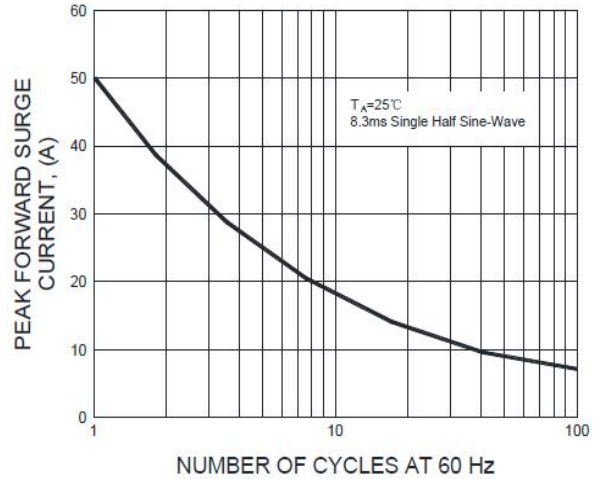


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

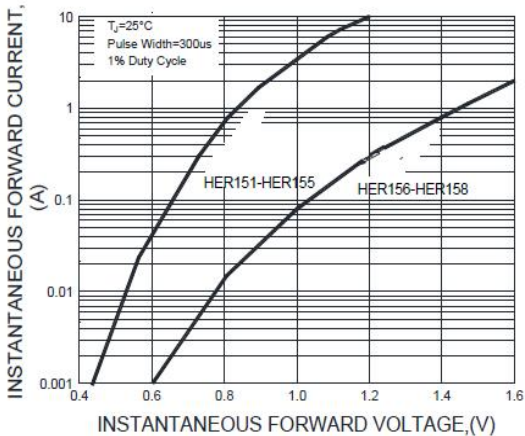


FIG.3-TYPICAL REVERSE CHARACTERISTICS

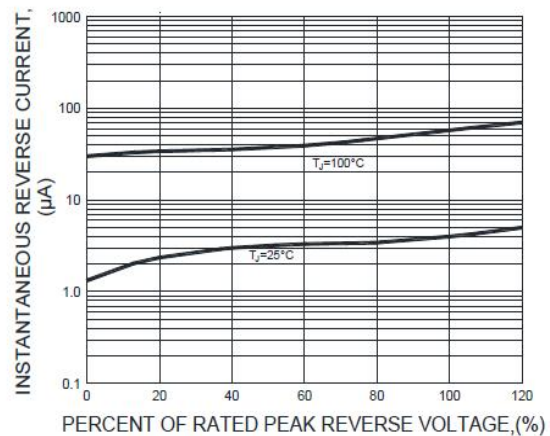


FIG.5-TYPICAL JUNCTION CAPACITANCE

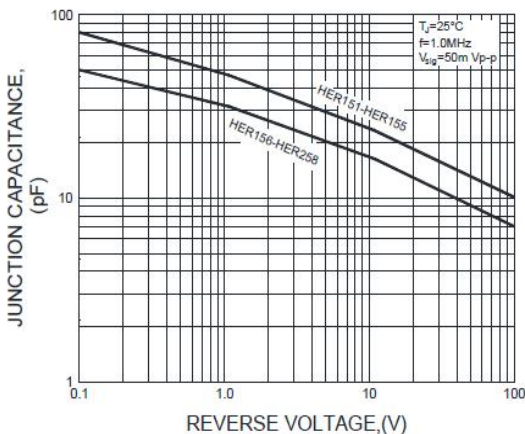
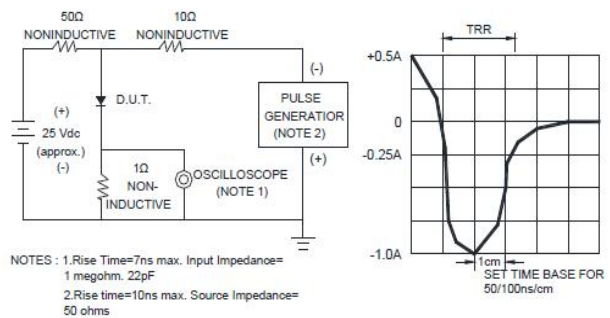


FIG.6-TEST CIRCUIT DIAGRAM AND FORWARD SURGE CURRENT



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.