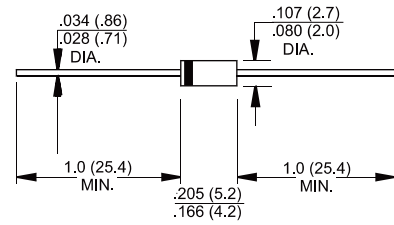


FEATURES

- High efficiency, Low VF
- High surge current capability
- High reliability
- High surge current capability
- For use in low voltage, high frequency inverter, free wheeling, and polarity protection application.



DO-41
Dimensions in inches and (millimeters)

MECHANICAL DATA

- Molded plastic body (UL 94 V-0 Rated)
- Polarity: Color band denotes cathode
- High temperature soldering 260°C / 10 seconds
- Lead: Pure tin plated, solderable per MIL-STD-202 method 208
- Weight: 0.35 grams

MAXIMUM RATINGS & 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 101	HER 102	HER 103	HER 104	HER 105	HER 106	HER 107	HER 108	Unit	
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	300	400	600	800	1000	V	
Maximum RMS Voltage	V _{RMS}	35	70	140	210	280	420	560	700	V	
Maximum DC Blocking Voltage	V _{DC}	50	100	200	300	400	600	800	1000	V	
Maximum Average Forward Rectified Current @ Ta = 55°C	I _{F(AV)}	1.0								A	
Peak Forward Surge (Non-Repetitive) Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	30								A	
Maximum Instantaneous Forward Voltage @ 1.0A	V _F	1.0			1.3		1.7			V	
Maximum DC Reverse Current @ TA = 25°C At rated DC blocking voltage @ TA = 125°C	I _R	5 150								µA	
Reverse Recovery Time (Note 1)	T _{rr}	50					75				nS
Junction Thermal Resistance	R _{θJA}	70								°C / W	
Typical Junction Capacitance Junction Thermal Resistance (Note 2)	C _J	25					20				pF
Operating Temperature Range	T _J	-65 to +150								°C	
Storage Temperature Range	T _{STG}	-65 to +150								°C	

NOTE: 1. Reverse Recovery Test conditions: I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A.
2. Measured on P. C. Board with 5mm x 5mm Copper Pad Areas.

RATING & CHARACTERISTIC CURVES

FIG. 1-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

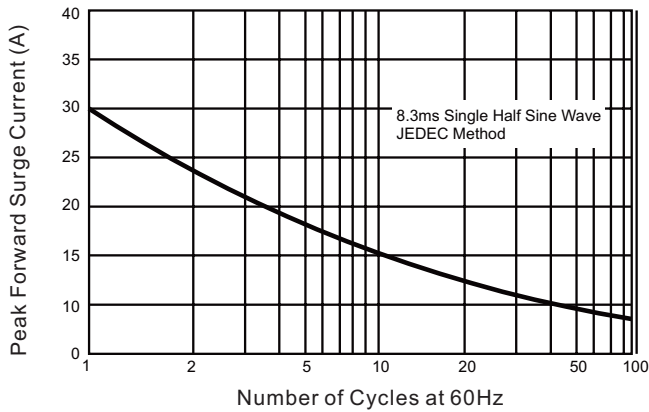


FIG. 2-MAXIMUM CURRENT DERATING CURVE

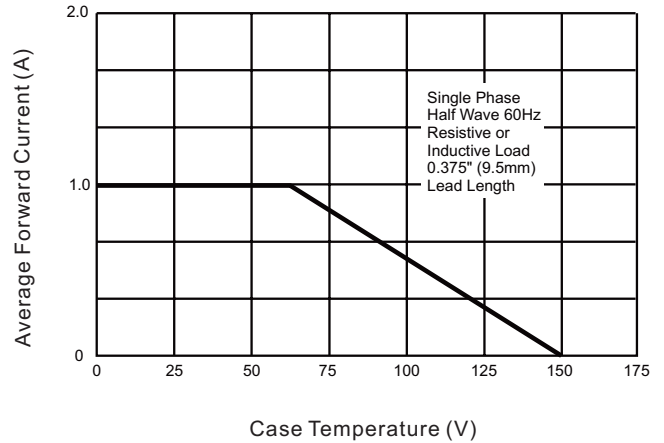


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

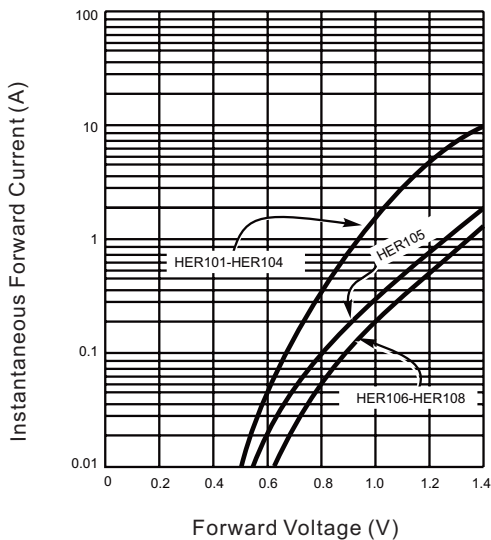


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

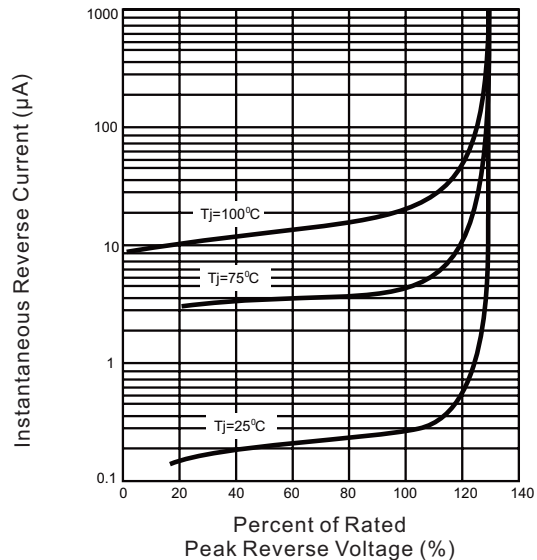


FIG. 5-REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

