

HIGH EFFICIENCY RECTIFIERS

REVERSE VOLTAGE - 50 to 1000 Volts
FORWARD CURRENT - 1.0 Ampere

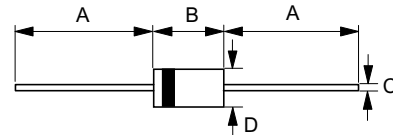
FEATURES

- Plastic passivated chip
- Super fast switching for high efficiency
- High current capability
- Low forward voltage drop and high current capability
- Low reverse leakage current
- Plastic material has UL flammability classification 94V-0

MECHANICAL DATA

- Case : Molded plastic
- Polarity : Indicated by cathode band
- Weight : 0.012 ounces, 0.34 grams

DO-41



DO-41		
Dim.	Min.	Max.
A	25.4	-
B	4.20	5.20
C	0.70 \varnothing	0.90 \varnothing
D	2.00 \varnothing	2.70 \varnothing
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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	VRRM	50	100	200	300	400	600	800	1000	V
Maximum RMS voltage	VRMS	35	70	140	210	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	300	400	600	800	1000	V
Maximum average forward rectified current	IF	1.0								A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	IFSM	30.0								A
Maximum instantaneous $I_F=1A@25$	VF	1.0		1.3		1.70				V
Maximum DC Reverse Current @TA=25 at Rated DC Blocking Voltage @TA=100	IR	5 200								uA
Maximum Reverse Recovery Time(Note1)	Trr	50.0				75.0				nS
Typical Junction Capacitance(Note2)	CJ	20				10				pF
Typical Thermal Resistance	R JL	30								/W
Operating Temperature Range	TJ	-55 to +150								
Storage Temperature Range	TSTG	-55 to +150								

Note1: Measured with $I_F=0.5A$, $I_R=1A$, $IRR=0.25A$

Note2: Measured 1.0MHZ and applied reverse voltage of 4.0 VDC

RATINGS AND CHARACTERISTIC CURVES

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

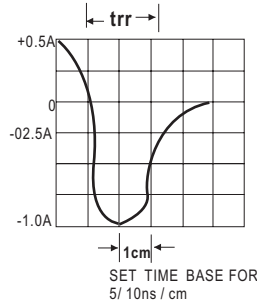
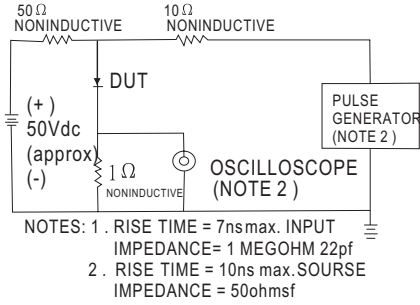


FIG. 2 - MAXIMUM AVERAGE FORWARD CURRENT DERATING

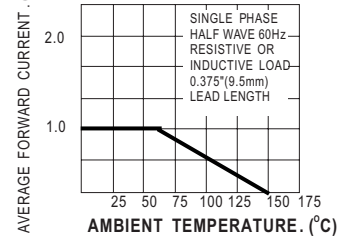


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

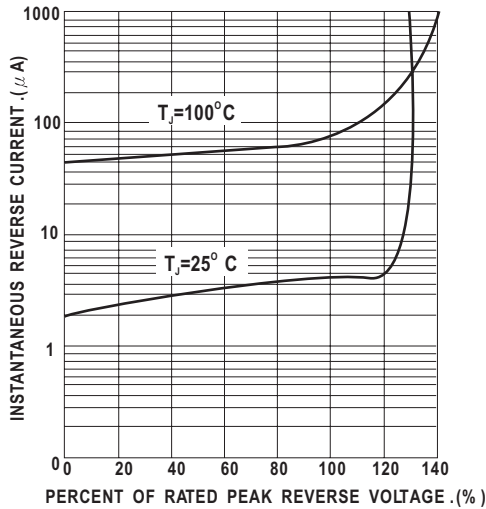


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

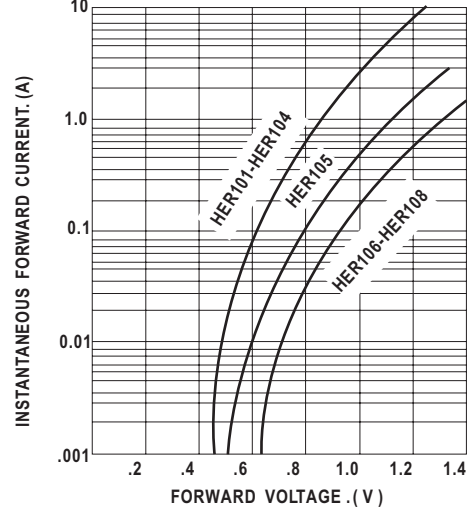


FIG. 5 - MAXIMUM NON - REPETITIVE FORWARD SURGE CURRENT

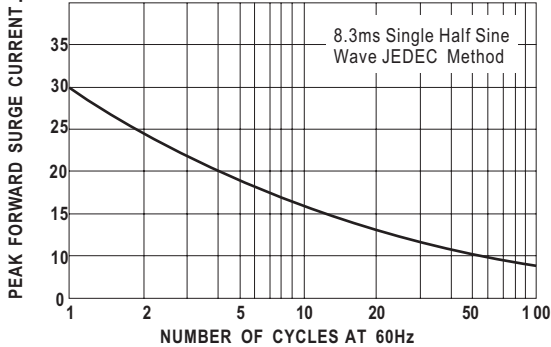


FIG. 6 - TYPICAL REVERSE CHARACTERISTICS

