



## HIGH EFFICIENCY RECTIFIERS

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

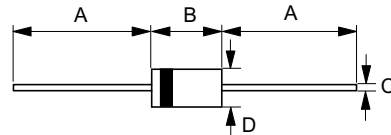
### FEATURES

- 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%

CHARACTERISTICS	SYMBOL	HER	HER	HER	HER	HER	HER	HER	HER	UNIT
		101	102	103	104	105	106	107	108	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current @T <sub>L</sub> =75 C	I(AV)	1.0								A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC METHOD)	I <sub>FSM</sub>	30								A
Maximum forward Voltage at 1.0A DC	V <sub>F</sub>	1.0		1.3		1.70				V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T <sub>J</sub> =25°C @T <sub>J</sub> =100°C	I <sub>R</sub>	5.0				200				uA
Maximum Reverse Recovery Time (Note 1)	T <sub>RR</sub>	50				75				ns
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	20				10				pF
Typical Thermal Resistance (Note 3)	R <sub>θJL</sub>	30								°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150								°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150								°C

NOTES : 1.Reverse Recovery Test Conditions :I<sub>F</sub>=0.5A,I<sub>R</sub>=1.0A,I<sub>RR</sub>=0.25A.  
2.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
3.Thermal Resistance junction to Lead.

RATINGS AND CHARACTERISTIC CURVES

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

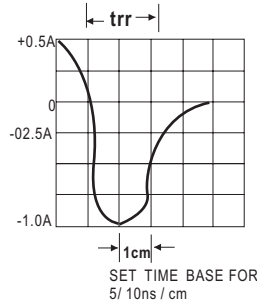
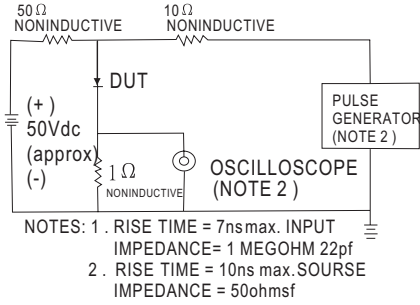


FIG. 2 - MAXIMUM AVERAGE FORWARD CURRENT DERATING

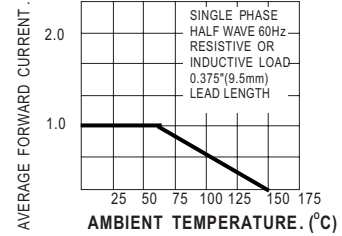


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

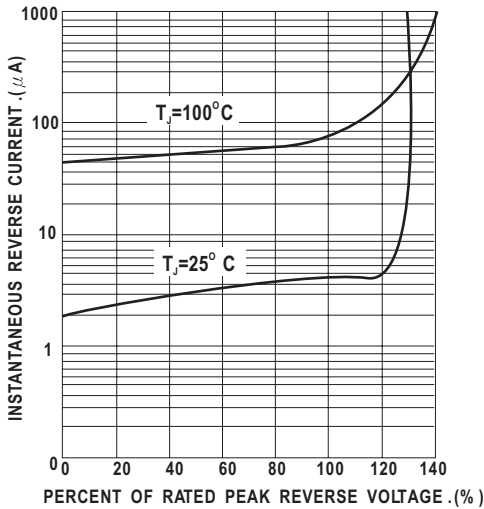


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

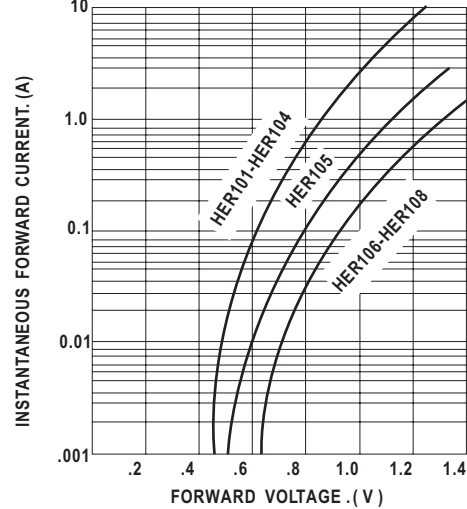


FIG. 5 - MAXIMUM NON - REPETITIVE FORWARD SURGE CURRENT

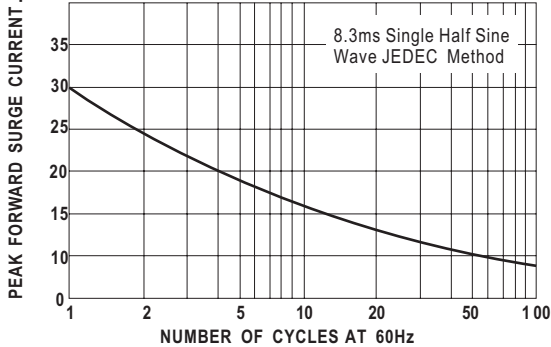


FIG. 6 - TYPICAL REVERSE CHARACTERISTICS

