

## HIGH EFFICIENCY RECTIFIERS

REVERSE VOLTAGE - **50 to 1000** Volts  
FORWARD CURRENT - **2.0** Ampere

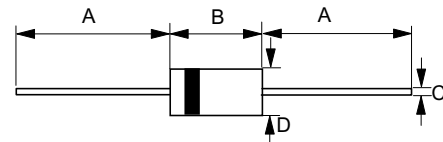
### FEATURES

- 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 : 0.015 ounces, 0.4 grams

### DO-15



DO-15		
Dim.	Min.	Max.
A	25.4	-
B	5.80	7.60
C	0.70 $\varnothing$	0.90 $\varnothing$
D	2.60 $\varnothing$	3.60 $\varnothing$

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
		201	202	203	204	205	206	207	208	
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)	2.0								A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC METHOD)	I <sub>FSM</sub>	60								A
Maximum forward Voltage at 2.0A 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				100				uA
Maximum Reverse Recovery Time (Note 1)	T <sub>RR</sub>	50				75				nS
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	50				30				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

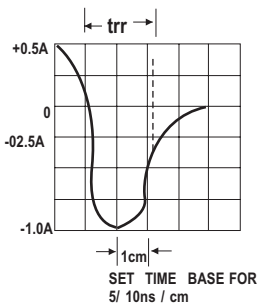
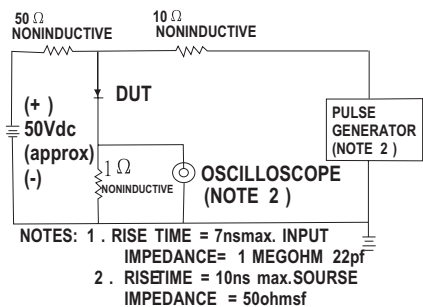


FIG . 2 -MAXIMUM AVERAGE FORWARD CURRENT DERATING

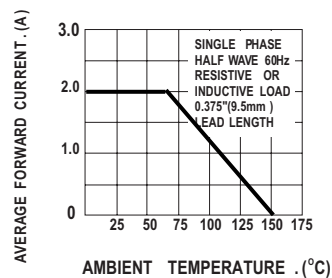


FIG . 3 -TYPICAL REVERSE CHARACTERISTICS

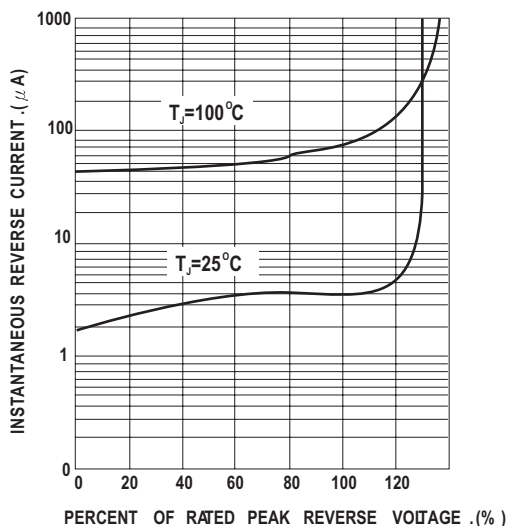


FIG . 4 -TYPICAL REVERSE CHARACTERISTICS

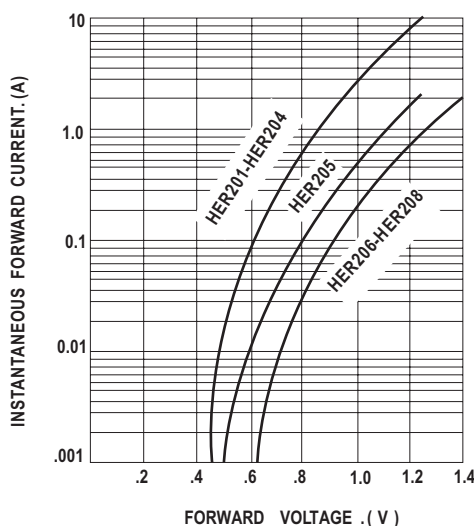


FIG . 5 - MAXIMUM NON - REPETITIVE FORWARD SURGE CURRENT

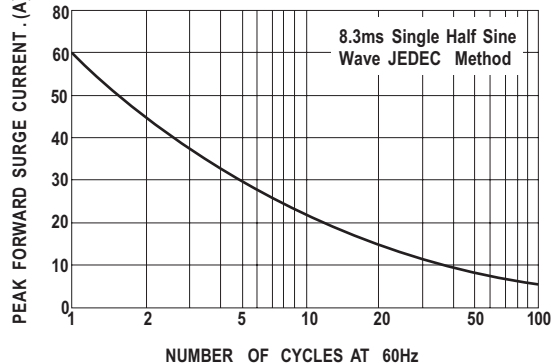


FIG . 6 -TYPICAL JUNCTION CAPACITANCE

