

## High Efficiency Silicon Rectifiers

Reverse Voltage - 100 to 1000 V

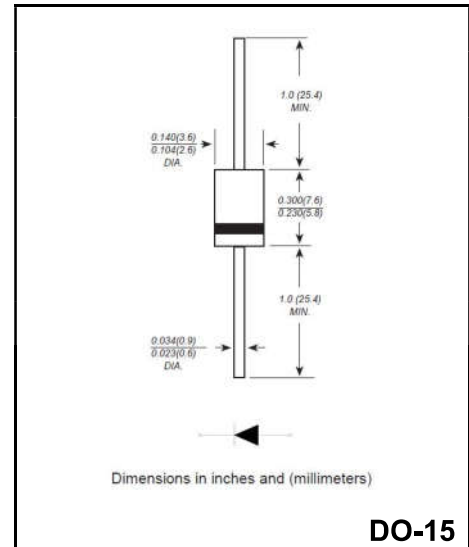
Forward Current – 2 A

### FEATURES

- ◆ For surface mounted applications
- ◆ Low profile package
- ◆ Open Junction chip
- ◆ Ideal for automated placement
- ◆ Lead free in comply with EU RoHS 2011/65/EU directives

### MECHANICAL DATA

- ◆ Case: DO-15
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026
- ◆ Approx. Weight: 0.33g / 0.0116oz



### Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

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

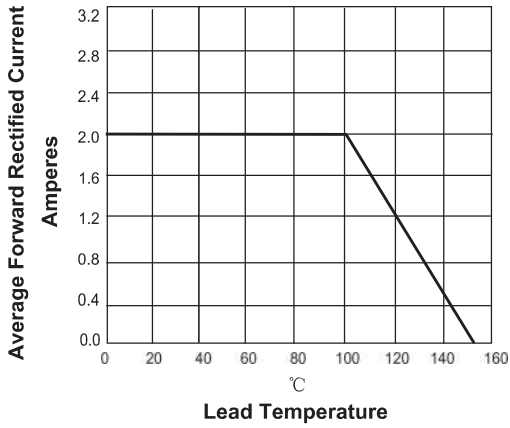
Parameter	Symbols	HER 202	HER 203	HER 204	HER 205	HER 206	HER 207	HER 208	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	100	200	300	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	70	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current at $T_c = 100\text{ }^\circ\text{C}$	$I_{F(AV)}$	2.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	$I_{FSM}$	60.0							A
Maximum Instantaneous Forward Voltage at 2.0A	$V_F$	0.95		1.25			1.65		V
Maximum DC Reverse Current $T_a = 25\text{ }^\circ\text{C}$ at Rated DC Blocking Voltage $T_a = 125\text{ }^\circ\text{C}$	$I_R$				10	500			$\mu\text{A}$
Maximum reverse recovery time <sup>(Note 1)</sup>	$T_{rr}$		50				75		nS
Typical Junction Capacitance <sup>(Note 2)</sup>	$C_j$				50.0				pF
Typical Thermal Resistance	$R_{\theta JA}$				75				$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_j, T_{stg}$				-55 ~ +150				$^\circ\text{C}$

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

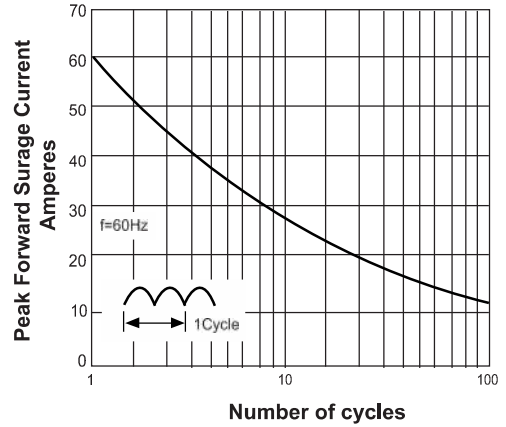
(2) Reverse recovery time test condition:  $I_F=0.5A$   $I_R=1.0A$   $I_{rr}=0.25A$

**Ratings And Characteristic Curves**

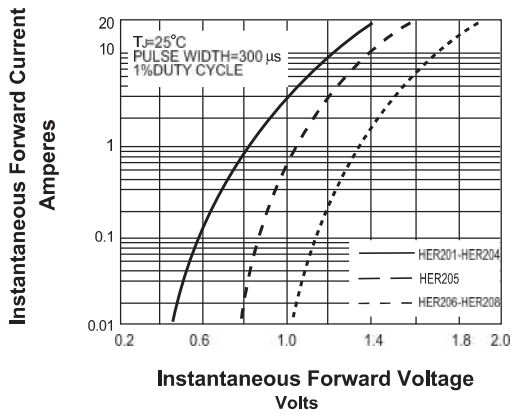
**FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT**



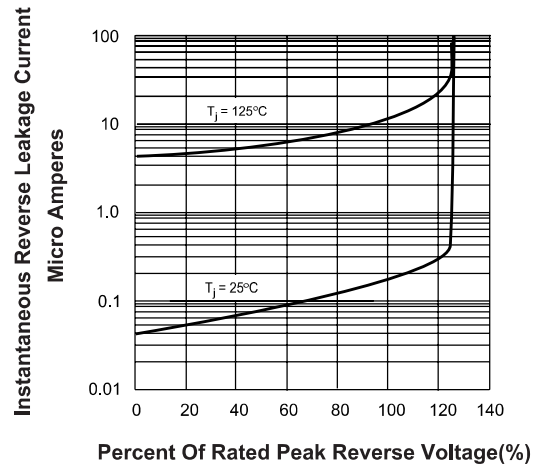
**FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG**



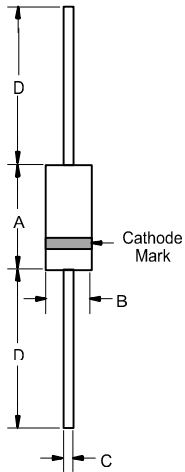
**FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS**



**FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS**



**Package Outline DO-15**



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.230	.300	5.8	7.6	
B	.104	.140	2.6	3.6	
C	.028	.034	0.71	0.86	
D	1.000	—	25.40	—	

**Summary of Packing Options**

Package	Packing Description	Packing Quantity	Industry Standard
DO-15	BOX	500/3000	EIA-481-1