

### 3.0Amp High Efficient Rectifier

#### FEATURES :

- Low power loss, high efficiency
- Low leakage, Low forward voltage drop
- High current capability, High speed switching
- High reliability
- High current surge
- RoHS compliant.



DO-201AD

#### MECHANICAL DATA :

- Case : Molded plastic, DO-201AD
- Terminals : Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- Polarity : Band denotes cathode



#### MAXIMUM RATINGS (Ratings at 25 °C ambient temperature unless otherwise specified)

Characteristic	Symbol	HER 301	HER 302	HER 303	HER 304	HER 305	HER 305P	HER 306	HER 307	HER 308	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	300	400	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	210	280	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	300	400	400	600	800	1000	V
Maximum Average Forward Rectified Current, at $T_A=50^{\circ}C$	$I_O$	3.0									A
Peak Forward Surge Current 8.3 ms single half sine-wave, superimposed on rated load (JEDEC method)	$I_{FSM}$	200						150			A
Maximum Forward Voltage at 3.0A DC	$V_F$	1.0			1.2	1.0	1.7			V	
Maximum DC reverse current at rated DC blocking voltage $T_A=25^{\circ}C$	$I_R$	10									uA
Typical Junction Capacitance <sup>(1)</sup>	$C_J$	70						50			pF
Maximum Reverse Recovery Time <sup>(2)</sup>	$T_{rr}$	50						75			ns
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 ~ +150									°C

Note 1 : Measured at 1 MH and applied reverse voltage of 4.0 VDC

2 : Test Conditions:  $I_F = 0.5A$ ,  $I_R = -1.0A$ ,  $I_{RR} = -0.25A$

RATINGS AND CHARACTERISTICS CURVES

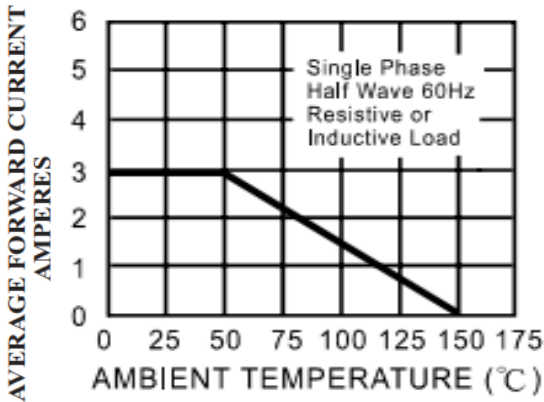


Figure 1. FORWARD CURRENT DERATING CURVE

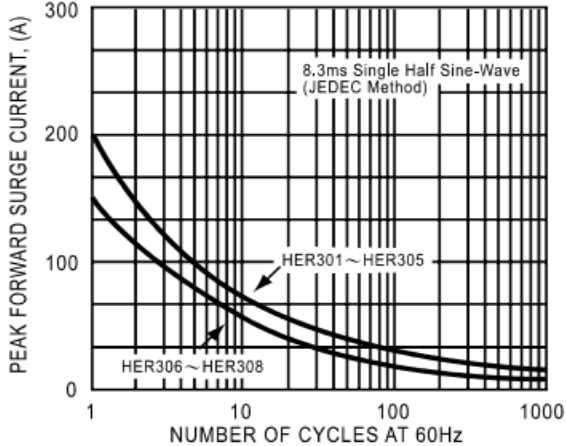


Figure 2. MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

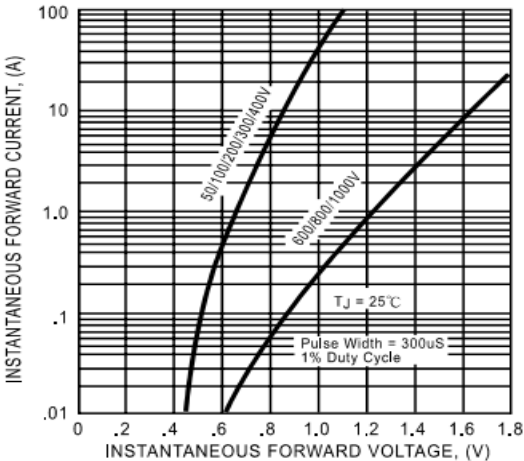


Figure 3. TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

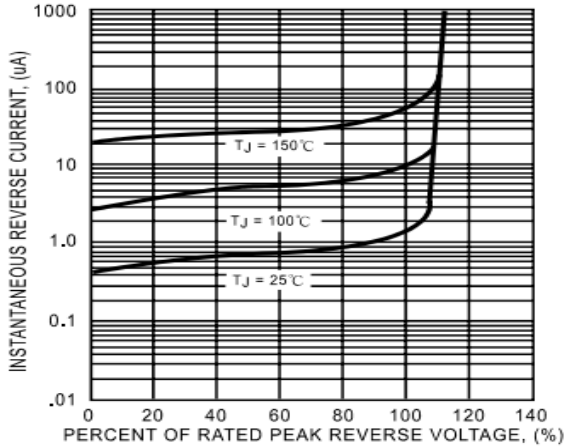


Figure 4. TYPICAL REVERSE LEAKAGE CHARACTERISTICS

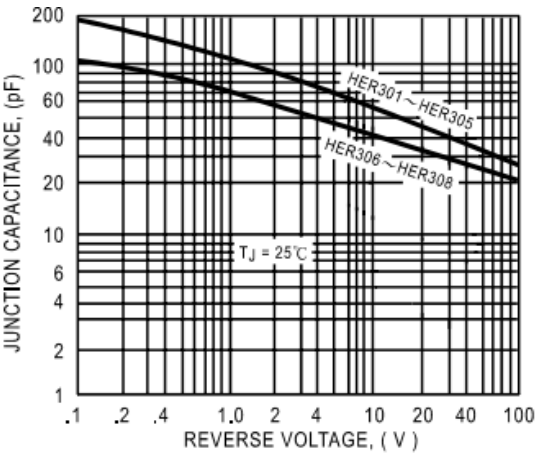
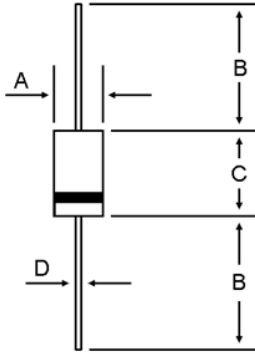


Figure 5. TYPICAL JUNCTION CAPACITANCE

- Package outlines : Dimensions in millimeters



DIM	MILLIMETERS	
	MIN	MAX
A	4.80	5.60
B	24.00	---
C	7.20	9.50
D	0.90	1.30

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