



DESCRIPTION

The HER201~HER208 are available in DO-15 Package

ORDERING INFORMATION

Package Type	Part Number
DO-15	HER201
	HER202
	HER203
	HER204
	HER205
	HER206
	HER207
	HER208
Note	SPQ: 2,000pcs/Reel
AiT provides all RoHS Compliant Products	

PIN DESCRIPTION



FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High temperature metallurgically bonded construction
- Deffused junction
- Capable of meeting environmental standards of MIL-S-19500
- 2.0 A operation at $T_A=55^{\circ}\text{C}$ with no thermal runaway
- For use in high frequency rectifier circuits
- Fast switching for high efficiency
- Typical IR less than $1.0\mu\text{A}$
- High temperature soldering guaranteed: $260^{\circ}\text{C}/10$ seconds
- 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension
- Available in DO-15 Package

MECHANICAL DATA

Case: JEDEC DO-15, molded plastic body

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.015 oz., 0.40 g

Handling precautin: None



MAXIMUM RATINGS AND THERMAL CHARACTERISTICS RATINGS

At 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	HER 201	HER 202	HER 203	HER 204	HER 205	HER 206	HER 207	HER 208	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current at 0.375"(9.5mm) lead length at $T_A = 55^\circ\text{C}$	$I_{F(AV)}$	2.0								A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	60								A
Maximum full load reverse current, full cycle average, 0.375"(9.5mm) lead lengths at $T_A = 55^\circ\text{C}$	$I_{R(AV)}$	100								μA
Typical thermal resistance ^{NOTE 2}	$R_{\theta JA}$	55								$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J , T_{STG}	-55 ~150								$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS RATINGS

At 25°C ambient temperature unless otherwise specified.

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Parameter		Symbol	HER 201	HER 202	HER 203	HER 204	HER 205	HER 206	HER 207	HER 208	Unit
Maximum instantaneous forward voltage at 2.0A		V _F	1.00			1.30		1.85			V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _A = 25°C T _A = 100°C	I _R	5.0 200								μA
Typical reverse recovery time ^{NOTE1}		t _{rr}	50					70			ns
Typical junction capacitance at 4.0V, 1MHz		C _J	15								pF

NOTE1: $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{RR} = 0.25\text{A}$

NOTE2: Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted



TYPICAL CHARACTERISTICS

$T_A = 25^\circ\text{C}$, unless otherwise noted

Figure. 1 Forward Current Derating Curve

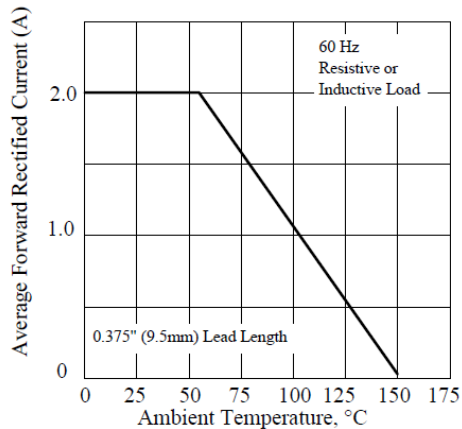


Figure. 3 Typical Instantaneous Forward Characteristics

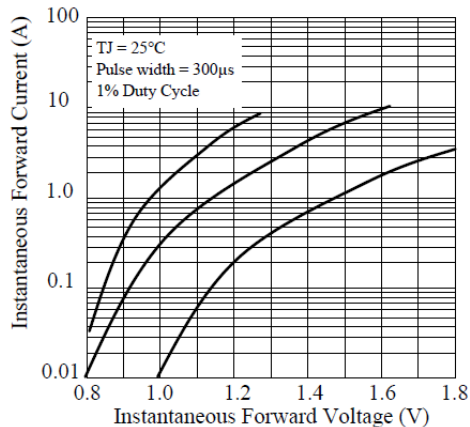


Figure. 5 Typical Transient Thermal Impedance

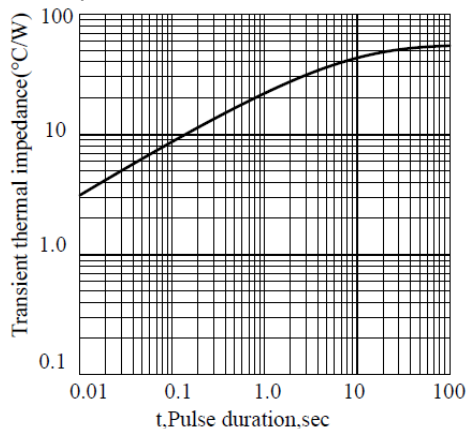


Figure. 2 Maximum Non-repetitive Peak Forward Surge Current

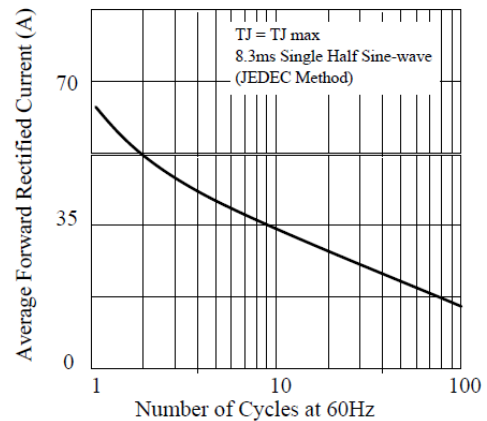


Figure. 4 Typical Reverse Characteristics

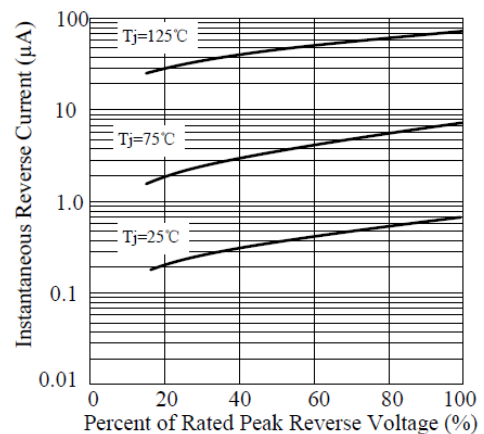
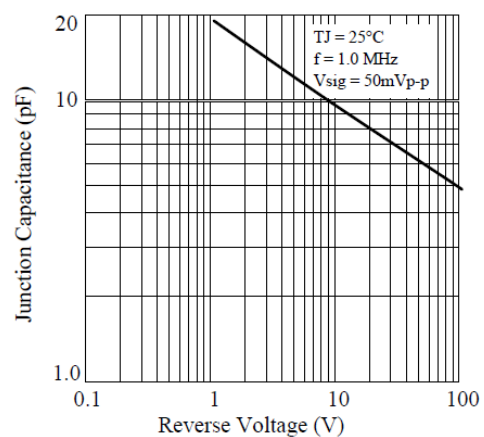


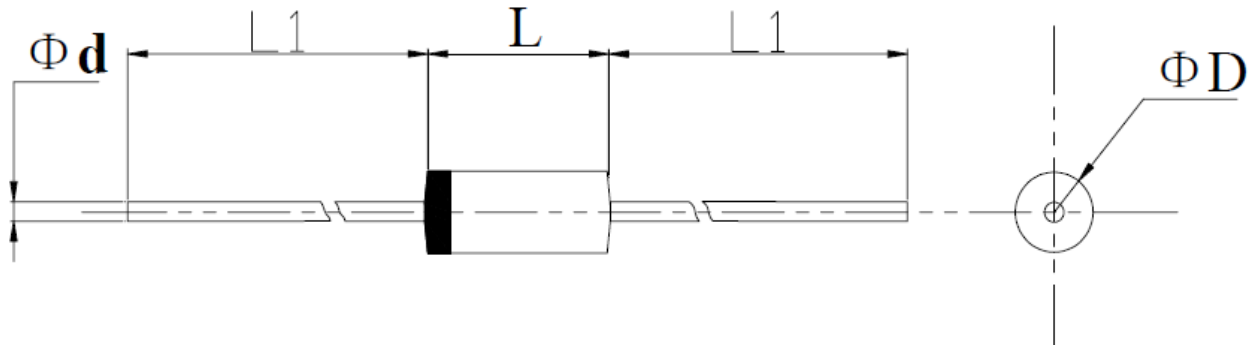
Figure. 6 Typical Junction Capacitance





PACKAGE INFORMATION

Dimension in DO-15 (Unit: mm)



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
L	5.80	7.60	0.230	0.300
L1	25.4	-	1.000	-
ΦD	2.60	3.60	0.104	0.140
Φd	0.70	0.90	0.028	0.034



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