DESCRIPTION

The HER201~HER208 are available in DO-15 Package

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°C with no thermal runaway
- For use in high frequency rectifier circuits
- Fast switching for high efficiency
- Typical IR less than 1.0μA
- High temperature soldering guaranteed: 260°C/10 seconds
- 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension
- 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

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°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°C	$I_{R(AV)}$	100								μA
Typical thermal resistance NOTE 2	$R_{\theta JA}$	55								°C/W
Operating junction and storage temperature range	T_J, T_{STG}	-55 ~150								°C

ELECTRICAL 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 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 = 0.5A, I_R = 1.0A, I_{RR} = 0.25A

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

TYPICAL CHARACTERISTICS

T_A = 25°C, unless otherwise noted

Figure. 1 Forward Current Derating Curve

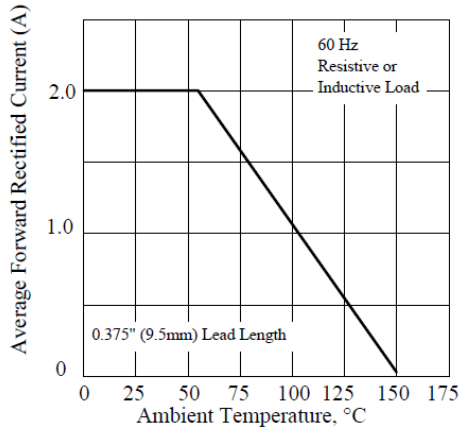


Figure. 2 Maximum Non-repetitive Peak Forward Surge Current

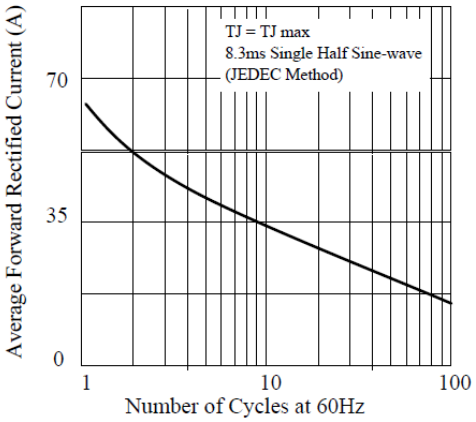


Figure. 3 Typical Instantaneous Forward Characteristics

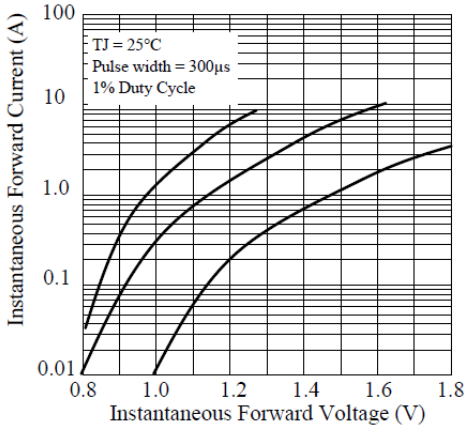


Figure. 4 Typical Reverse Characteristics

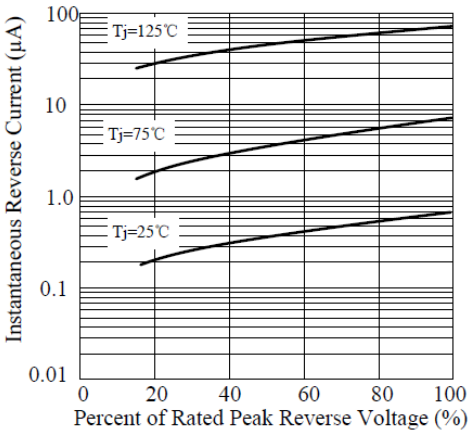


Figure. 5 Typical Transient Thermal Impedance

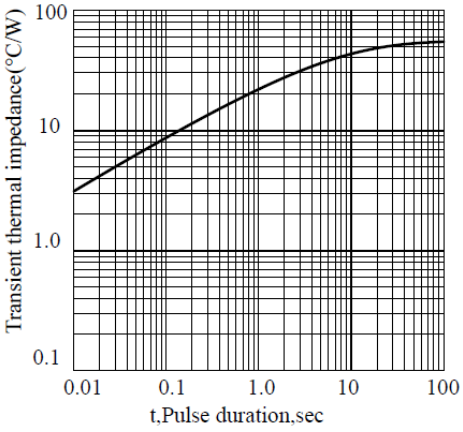
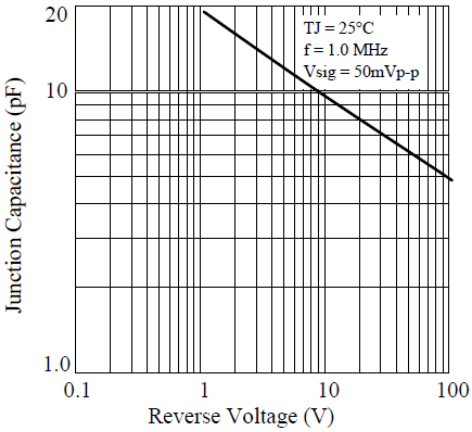
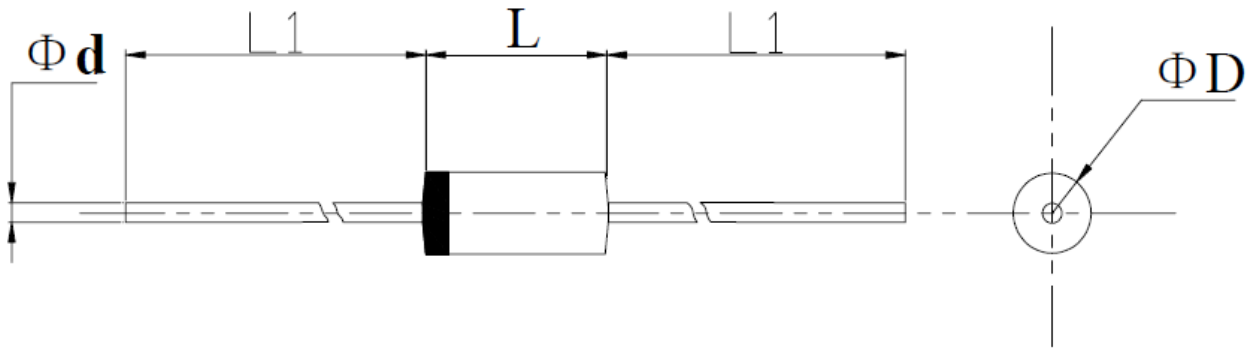


Figure. 6 Typical Junction Capacitance



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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