Technical Data
Data Sheet N1632, Rev. -

Green Products

HER301G-HER308G
HIGH EFFICIENCY RECTIFIER

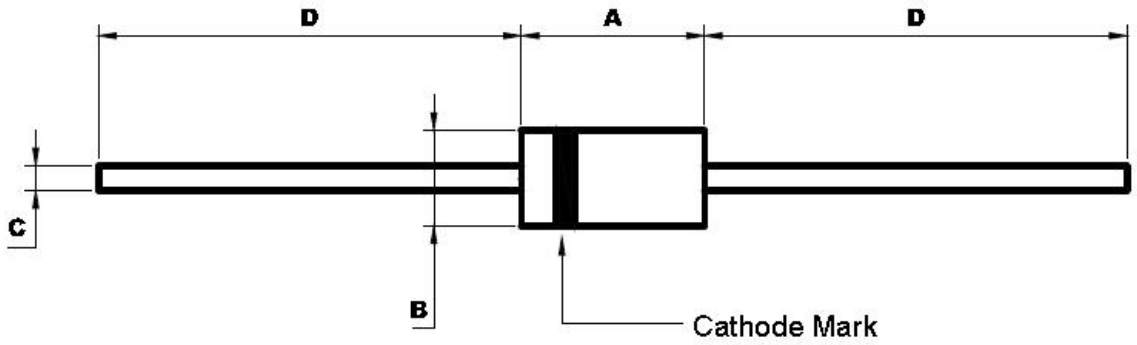
Features:

- **Low power loss, high efficiency**
- **Low leakage**
- **Low forward voltage drop**
- **High current capability**
- **High speed switching**
- **High reliability**
- **High current surge**
- **This is a Pb − Free Device**
- **All SMC parts are traceable to the wafer lot**
- **Additional testing can be offered upon request**

Mechanical Data:

- **Case: Molded plastic**
- **Epoxy: UL94V-0 rate flame retardant**
- **Lead: MIL-STD-202E method 208C guaranteed**
- **Mounting Position: Any**
- **Weight: 1.1 gram**

Mechanical Dimensions: In mm



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.335	0.374	8.50	9.50	
B	0.197	0.220	5.00	5.60	Φ
C	0.048	0.052	1.20	1.30	Φ
D	1.000	——	25.40	——	

DO-201AD

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Marking Diagram:

Where XXXXX is YYWWL

HER301G	= Part Name
SSG	= SSG
YY	= Year
WW	= Week
L	= Lot Number

Cautions: Molding resin
Epoxy resin UL:94V-0

Ordering Information

Device	Package	Shipping
HER301G-HER308G	DO-201AD (Pb-Free)	1250 pcs / Tape

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

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Maximum Ratings and Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

	SYMBOLS	HER 301G	HER 302G	HER 303G	HER 304G	HER 305G	HER 306G	HER 307G	HER 308G	UNIS
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 0.375"(9.5mm) lead length at T_A=50℃	$I_{(AV)}$	3.0								A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150.0								A
Maximum instantaneous forward voltage at 3.0A	V_F	1.0			1.30		1.70			V
Maximum DC reverse current T_A=25℃ at rated DC blocking voltage T_A=100℃	I_R	10 150								μA
Maximum reverse recovery time (Note 1)	t_{rr}	50					75			ns
Typical junction capacitance (Note 2)	C_J	70					50			pF
Typical thermal resistance (Note 3)	$R_{\theta JA}$	20								℃/W
Operating junction and storage temperature range	T_J,T_{STG}	-65 to +150								℃

Note: 1. Reverse recovery condition IF=0.5A, IR=1.0A. Irr=0.25A
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
3. Thermal resistance from junction to ambient at 0.375”(9.5mm) lead length, P.C.B mounted.

FIG. 1- FORWARD CURRENT DERATING CURVE

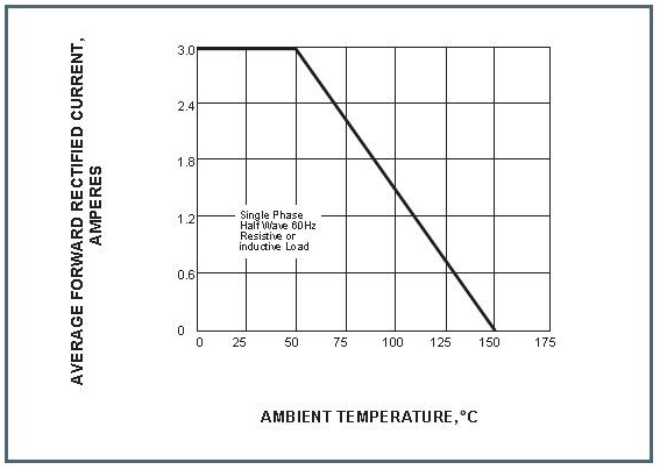


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

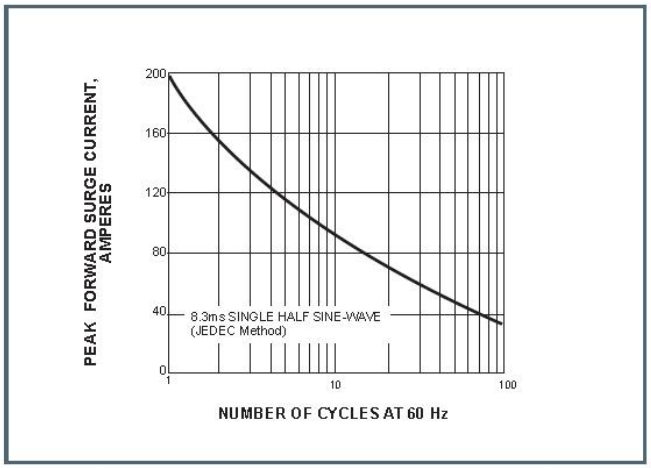


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

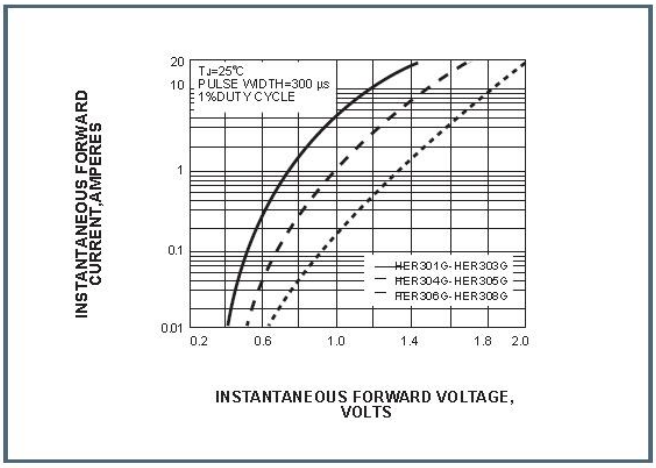
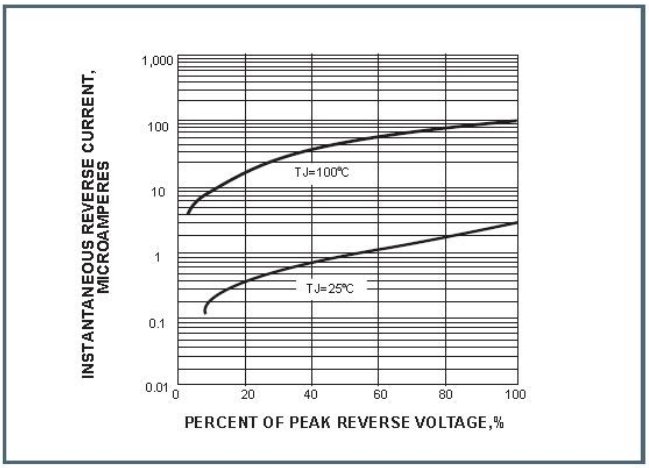


FIG. 4-TYPICAL REVERSE CHARACTERISTICS



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