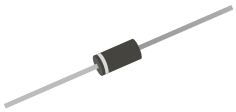
Efficient Fast Recovery Rectifiers

SMD Diodes Specialist

HER301G-G Thru. HER308G-G

Voltage: 50 to 1000 V
Current: 3.0 A
RoHS Device



Features

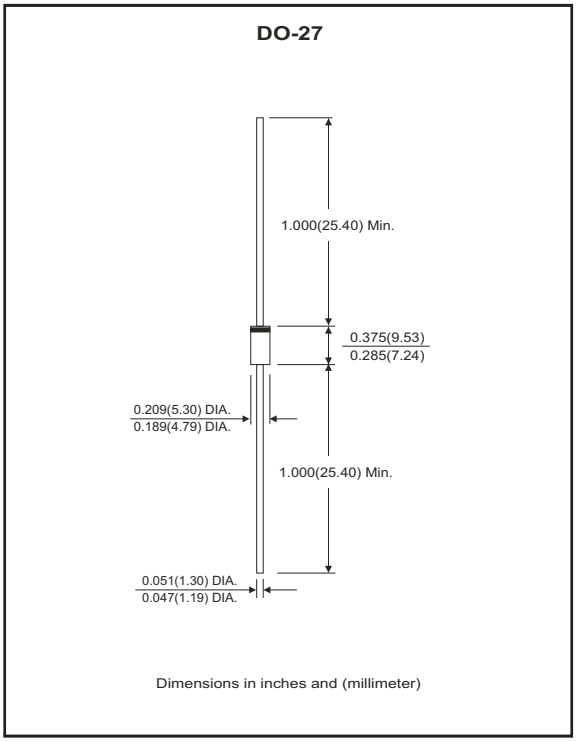
-Glass passivated chip.

-Low forward voltage.

-High reliability.

-High surge current capability.

-High speed switching.



Mechanical data

-Case: JEDEC DO-27 molded plastic.

-Epoxy: UL 94V-0 rate flame retardant.

-Polarity: Color band denotes cathode end.

-Lead: Solderable per MIL-STD-202,
method 208 guaranteed.

-Mounting position: Any

-Weight: 0.844 grams

Electrical Characteristics (at T_A=25°C unless otherwise noted)

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

Parameter	Symbol	HER 301G-G	HER 302G-G	HER 303G-G	HER 304G-G	HER 305G-G	HER 306G-G	HER 307G-G	HER 308G-G	Unit
Maximum repetitive peak reverse voltage @I_T = 5μA	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 @T_A=25°C	$I_{(AV)}$	3.0								A
Maximum instantaneous forward voltage at specified current	V_F	1.0				1.3		1.7		V
Maximum DC reverse current	I_R	5.0								μA
Maximum reverse recovery time (Note 1)	t_{rr}	50					75			ns
Operating temperature range	T_J	-55 ~ +150								°C
Storage temperature range	T_{STG}	-55 ~ +150								°C

NOTES:
1. Reverse recovery test conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A(RGI circuit)

Rating and Characteristic Curves (HER301G-G Thru. HER308G-G)

Fig.1- Forward Current Derating Curve

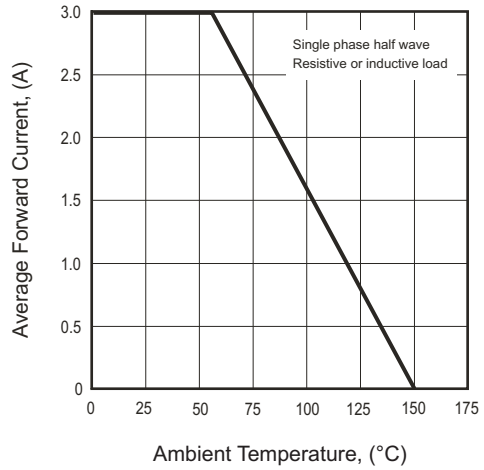


Fig.2- Typical Forward Characteristics

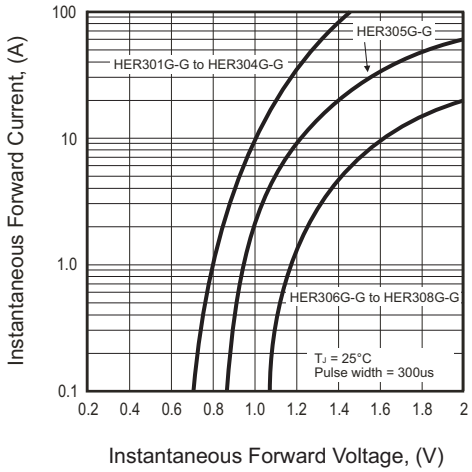


Fig.3- Peak Forward Surge Current

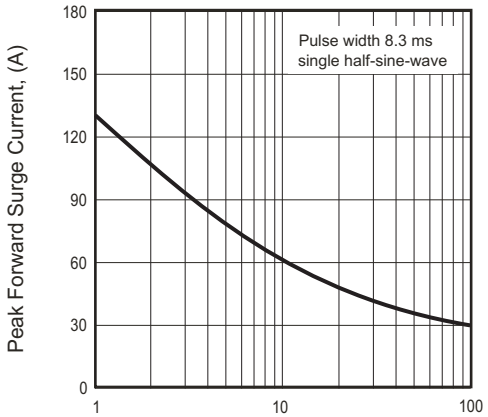
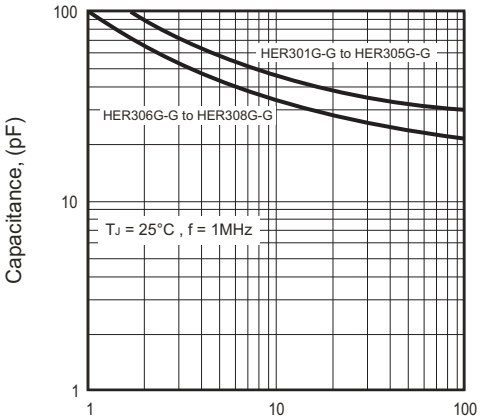
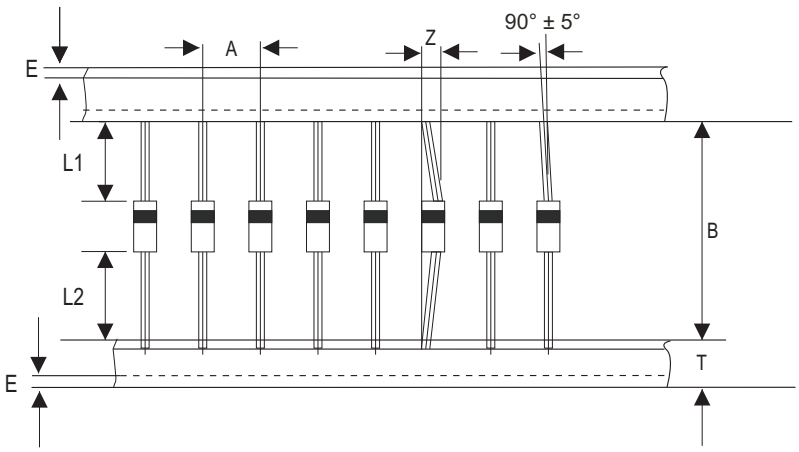
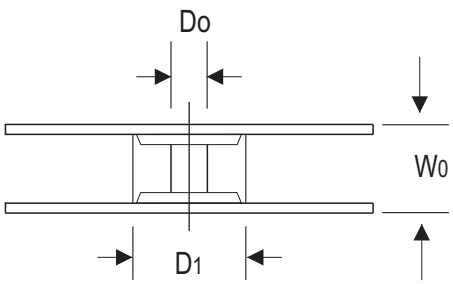


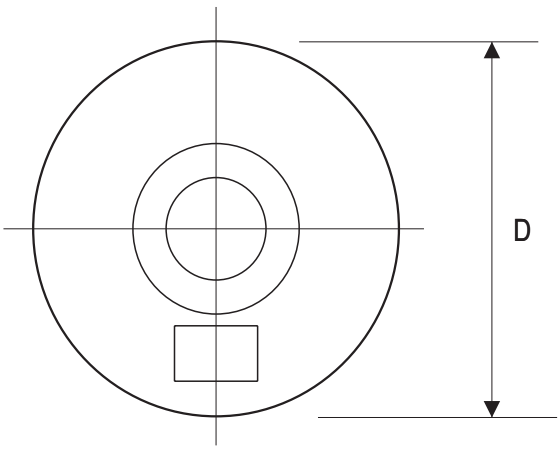
Fig.4- Typical Junction Capacitance

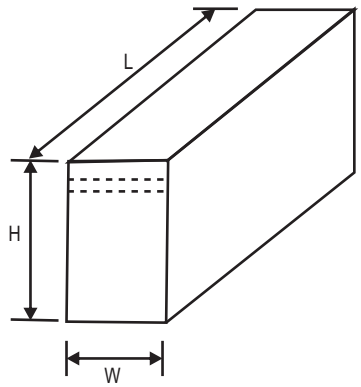


Taping Specification For Axial Lead Diodes









	SYMBOL	A	B	Z	T	E	L1	L2
DO-27	(mm)	10.00 ± 0.50	52.00 ± 0.50	1.20 (max)	6.00 ± 0.40	1.00 (max)	1.00 (max)	1.00 (max)
	(inch)	0.394 ± 0.020	2.047 ± 0.020	0.047 (max)	0.236 ± 0.016	0.039 (max)	0.039 (max)	0.039 (max)

	SYMBOL	D1	D0	D	W0	L	W	H
DO-27	(mm)	85.70 ± 0.30	16.60 ± 0.40	330.00	72.00 ± 3.00	260.00	75.00	145.00
	(inch)	3.374 ± 0.012	0.654 ± 0.016	13.000	2.835 ± 0.118	10.236	2.953	5.709

Marking Code

Part Number	Marking code	Packaging
HER301G-G	HER301	AMMO
HER302G-G	HER302	AMMO
HER303G-G	HER303	AMMO
HER304G-G	HER304	AMMO
HER305G-G	HER305	AMMO
HER306G-G	HER306	AMMO
HER307G-G	HER307	AMMO
HER308G-G	HER308	AMMO
HER301GB-G	HER301	BULK
HER302GB-G	HER302	BULK
HER303GB-G	HER303	BULK
HER304GB-G	HER304	BULK
HER305GB-G	HER305	BULK
HER306GB-G	HER306	BULK
HER307GB-G	HER307	BULK
HER308GB-G	HER308	BULK
HER301GT-G	HER301	REEL
HER302GT-G	HER302	REEL
HER303GT-G	HER303	REEL
HER304GT-G	HER304	REEL
HER305GT-G	HER305	REEL
HER306GT-G	HER306	REEL
HER307GT-G	HER307	REEL
HER308GT-G	HER308	REEL



XXX = Product type marking code

Note:

1) Suffix code after part number to specify packaging item .

Packaging	Code
AMMO PACK	NA
BULK PACK	B
REEL PACK	T

Standard Packaging

Case Type	AMMO PACK	
	BOX (pcs)	CARTON (pcs)
DO-27	1,200	12,000

Case Type	BULK PACK	
	BOX (pcs)	CARTON (pcs)
DO-27	200	10,000
	500	12,000

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
DO-27	1,200	13