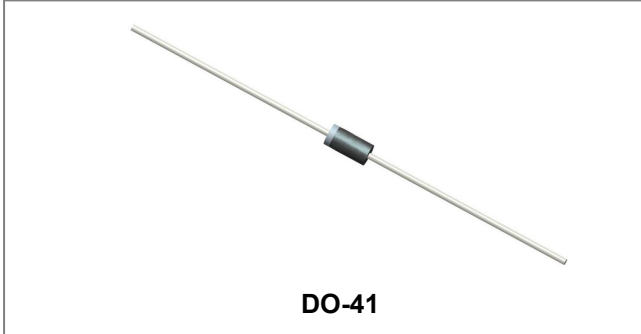


HER101G-HER108G HIGH EFFICIENCY GLASS PASSIVATED RECTIFIER



Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Ultra-fast switching for high efficiency
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed 250°C/10 seconds, 0.375" (9.5mm) lead length, 5lbs. (2.3kg) tension
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



Mechanical Data

- Case: JEDEC DO-41 molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.012 ounce, 0.34 grams

Maximum Ratings and Electrical Characteristics @_{T_A}=25°C unless otherwise specified

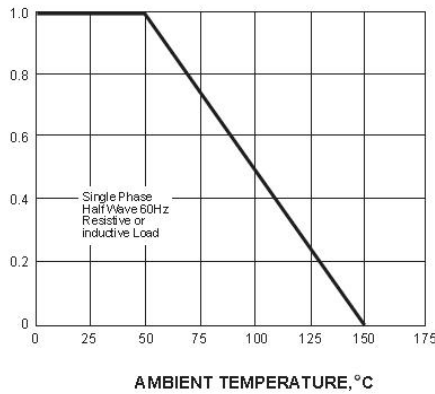
	SYMBOLS	HER 101G	HER 102G	HER 103G	HER 104G	HER 105G	HER 106G	HER 107G	HER 108G	Units
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	300	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	210	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	300	400	600	800	1000	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at T _A =50°C	I <sub(av)< sub=""></sub(av)<>	1.0								A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30.0								A
Maximum instantaneous forward voltage at 1.0A	V _F	1.0		1.30		1.70			V	
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	5.0 100								µA
Maximum reverse recovery time (Note 1)	t _{rr}	50					70			ns
Typical junction capacitance (Note 2)	C _J	15.0					12.0			pF
Typical thermal resistance (Note 3)	R _{θJA}	50.0								°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-55 to +150								°C

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.

Ratings and Characteristics Curves

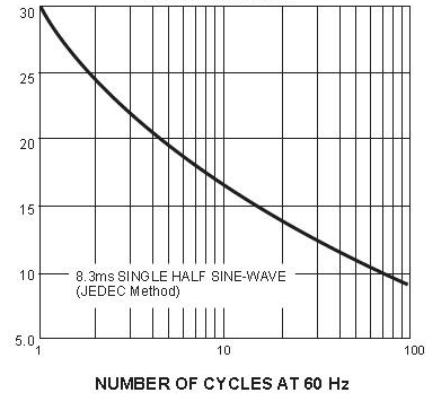
AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



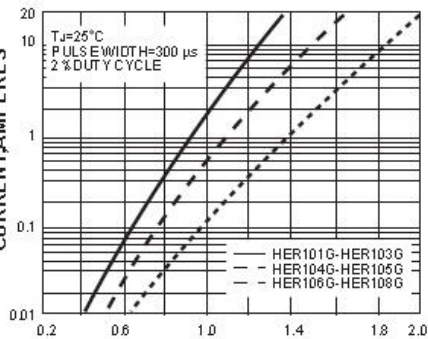
PEAK FORWARD SURGE CURRENT,
AMPERES

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



INSTANTANEOUS FORWARD CURRENT, AMPERES

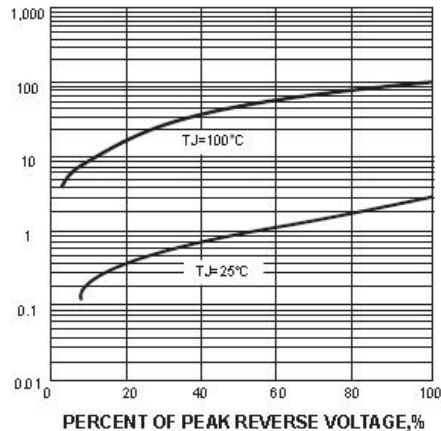
FIG. 3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS FORWARD VOLTAGE,
VOLTS

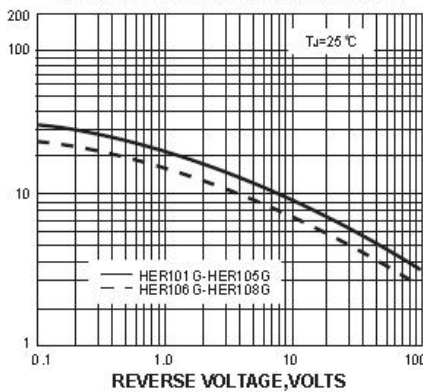
INSTANTANEOUS REVERSE CURRENT,
MICROAMPERES

FIG. 4- TYPICAL REVERSE CHARACTERISTICS



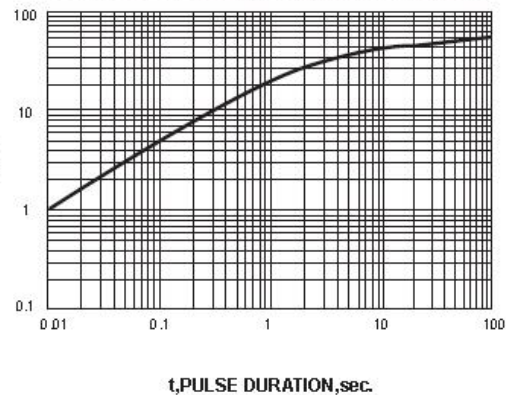
JUNCTION CAPACITANCE, pF

FIG. 5- TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE,
°C/W

FIG. 6- TYPICAL TRANSIENT THERMAL IMPEDANCE



Mechanical Dimensions DO-41



SYMBOL	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	25.4	-	1.000	-
B	4.06	5.21	0.160	0.205
C	0.71	0.864	0.028	0.034
D	2.00	2.72	0.079	0.107

Ordering Information

Device	Package	Shipping
HER101G THRU HER108G	DO-41 (Pb-Free)	5000pcs /reel
HER101GTR THRU HER108GTR	DO-41 (Pb-Free)	5000pcs /reel
HER101GTA THRU HER108GTA	DO-41 (Pb-Free)	5000pcs /tape

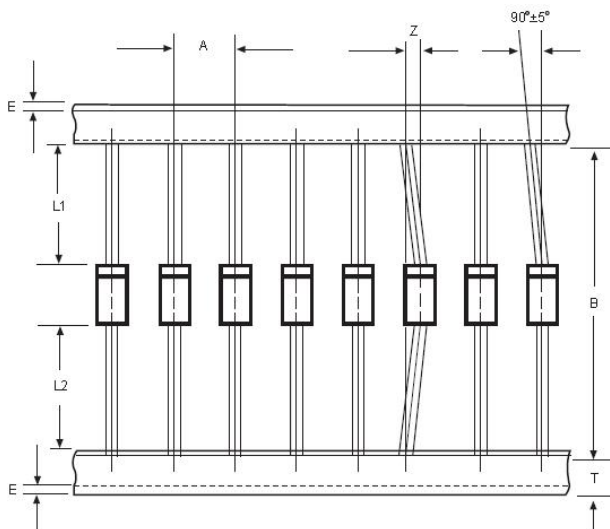
For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram



HER101G = Part Name

Carrier Tape Specification DO-41



SYMBOL	Millimeters	
	Min.	Max.
A	4.50	5.50
B	50.9	53.9
Z	-	1.20
T	5.60	6.40
E	-	0.80
IL1-L2I	-	1.0

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