Elektronische Bauelemente

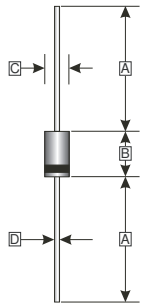
HER501G ~ HER507G

VOLTAGE 50 ~ 1000 V, 5.0AMP

Glass Passivated High Efficiency Rectifiers

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

DO-27



FEATURES

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- High speed switching

MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, Methode 208 guranteed
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 1.10 grams

REF.	Millimeter	
	Min.	Max.
A	25.4 (TYP)	
B	7.20	9.50
C	4.80	5.60
D	1.10	1.30

MAXIMUM RATINGS (T_A=25℃ unless otherwise specified)

PARAMETER		SYMBOL	PART NUMBERS							UNIT
			HER 501G	HER 502G	HER 503G	HER 504G	HER 505G	HER 506G	HER 507G	
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage		V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 9.5mm Lead length at T_A=50℃		I_F	5.0							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC methode)		I_{FSM}	100							A
Maximum Instantaneous Forward Voltage @ 5.0A		V_F	1.0			1.3	1.85			V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_A=25℃	I_R	10							μA
	T_A=100℃		200							
Maximum Reverse Recovery Time [1]		T_{RR}	50				70			nS
Typical Junction Capacitance [2]		C_J	100							pF
Operating & Storage Temperature		T_J,T_{STG}	-55~150							℃

Note: 1. Reverse Recovery Time test condition: I_F =0.5A, I_R=1.0A, I_{RR} =0.25A
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
3. Single Phase half wave, 60Hz, resistive or inductive load.
4. For capacitive load, derate current by 20%.

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RATINGS AND CHARACTERISTIC CURVES

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

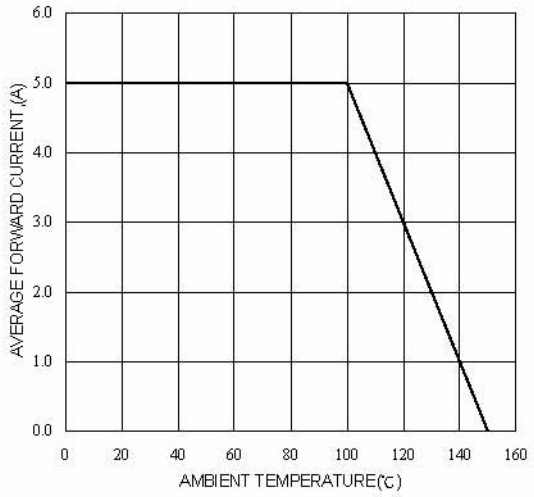

FIG. 2-TYPICAL FORWARD CHARACTERISTICS

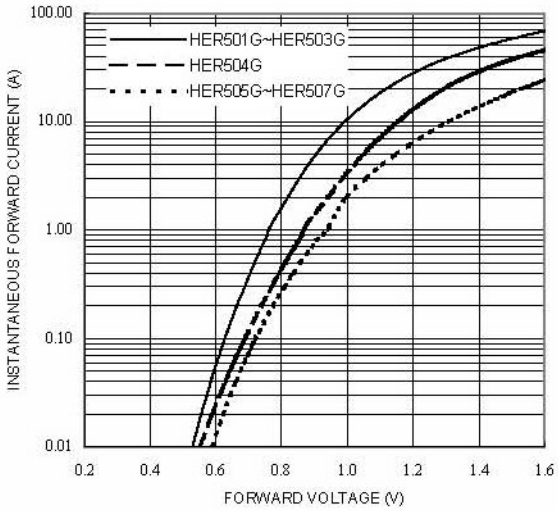

FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

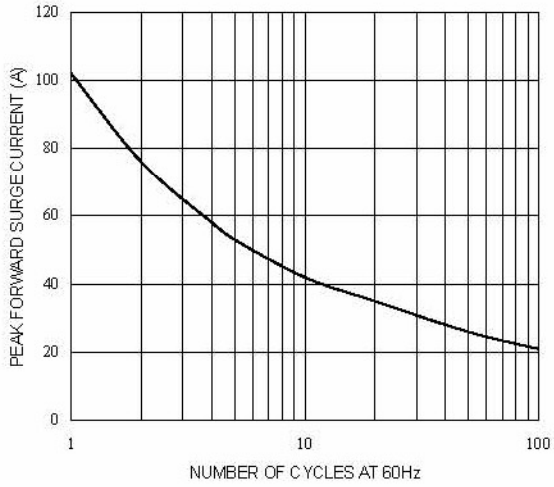

FIG. 4-TYPICAL REVERSE CHARACTERISTICS

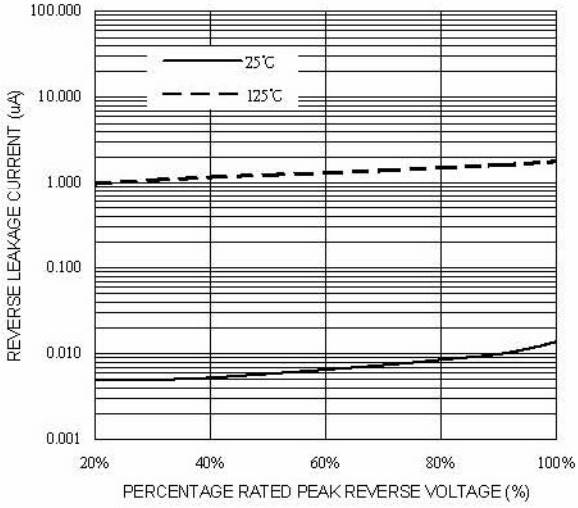

FIG. 5-TYPICAL JUNCTION CAPACITANCE