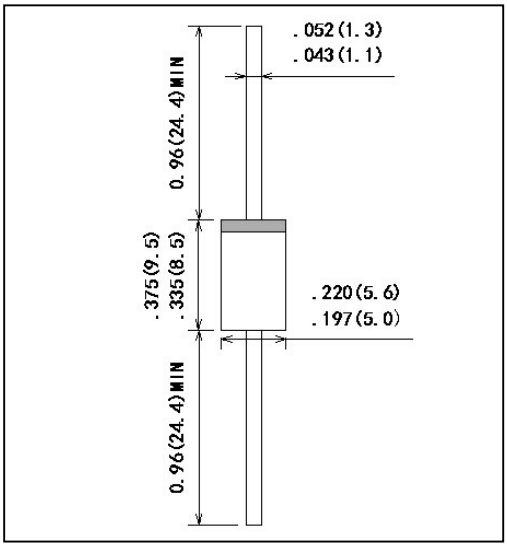
旭昌辉半导体
XUCHANGHUI Semiconductor

HER308G

Super Fast Recovery Rectifier
3.0 A / 1000 V

Package Outline Dimensions in mm (inches)

DO27



Features

- Glass Passivated Die
- Superfast Recovery times for high efficiency
- Low leakage current
- High forward surge capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C
- Compliant to RoHS Directive 2002/95/EC and in accordance to WEEE 2002/96/EC

Typical Applications

- For use in switching power Supplies.

Mechanical Data

- Case:DO27 Plastic Package
- Polarity:Color band denotes cathode end

Maximum ratings

Ratings at TA=25℃ (unless otherwise specified)

Parameter	Symbol	HER308G	Unit
Maximum recurrent peak reverse voltage	V_{RRM}	1000	V
Maximum RMS voltage	V_{RMS}	800	V
Maximum DC blocking voltage	V_{DC}	1000	V
Maximum average forward rectified current (Note1)	$I_{F(AV)}$	3.0	A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	125	A
Storage temperature range	T_S	-55 to 150	°C
Operating Junction temperature range	Tj	-55 to 150	°C
Thermal Resistance (Note1)	R_{thJA}	25	°C /W

Note1：Vertical P.C.B. mounting, 12.7 mm lead length with 63.5 mm x 63.5 mm copper pad.

Electrical characteristics

Ratings at TA=25℃ (unless otherwise specified)

Parameter	Test Conditions	Symbol	HER308G	Unit
Maximum forward voltage	IF=3.0 A	VF	1.70	V
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	IR	5.0	μA
	TA=125°C		100	
Maximum Reverse Recovery Time	RG1	Trr	75	ns

Characteristics Curves

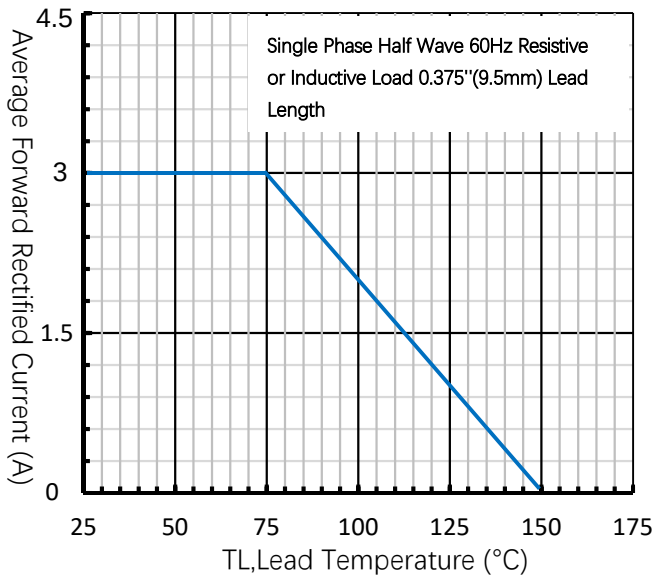


Fig.1 Forward Current Derating Curve

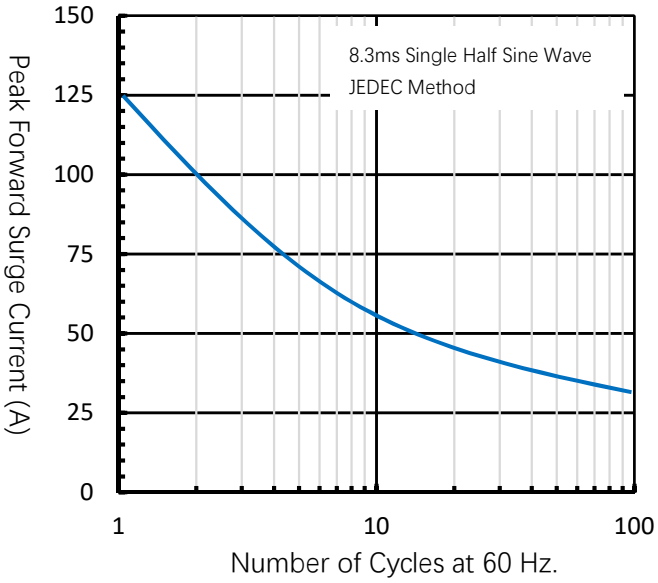


Fig.2 Forward Surge Current Capability

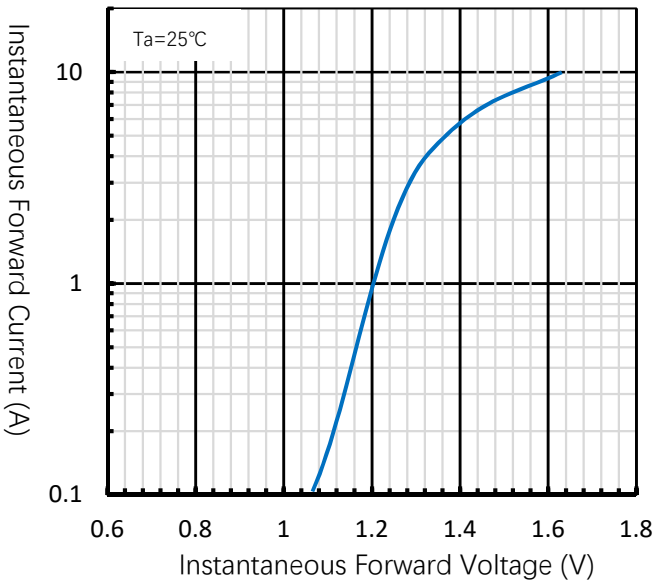


Fig. 3 Typical Forward Characteristic

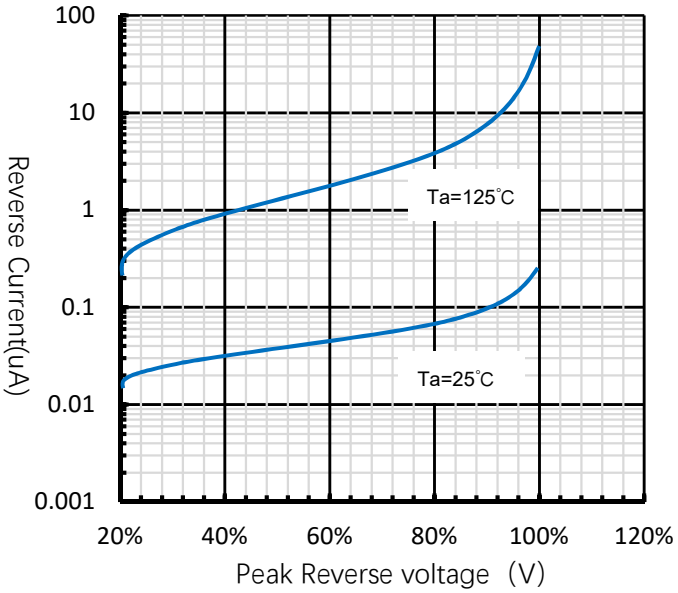


Fig. 4 Typical Reverse Characteristics