

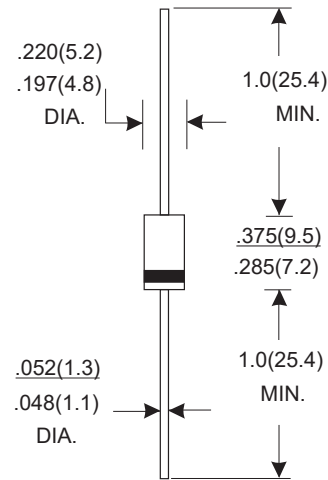
DO-27 PLASTIC SILICON RECTIFIERS

FEATURES

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- High reliability
- Low forward voltage drop
- Low power loss, high efficiency
- High forward surge current capability
- High temperature soldering guaranteed: 260 C/10 seconds at terminals
- Component in accordance to RoHs 2002/95/EC and WEEE 2002/96/EC

MECHANICAL DATA

- Case style: DO-27 plastic molded
- Terminals: Axial lead, solderable per MIL- STD-202, Method 208
- Polarity: Color band denotes cathode end
- Mounting Position: Any



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	HER	HER	HER	HER	HER	HER	HER	HER	UNITS	
		301	302	303	304	305	306	307	308		
Maximum recurrent 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.375"(9.5mm) Lead Length at Ta=55°C	$I_{F(AV)}$	3.0								A	
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150.0								A	
Maximum Instantaneous Forward Voltage at 2.0A	V_F	1.0		1.3		1.7			V		
Maximum reverse current at rated DC blocking voltage	I_R	@T _A =25°C								10.0	μA
		@T _A =100°C								150.0	
Maximum reverse recovery time (Note1)	t_{rr}	50					75			ns	
Typical junction capacitance (Note2)	C_J	70					50			pF	
Typical thermal resistance	$R_{θJA}$	30								°C/W	
Operating junction temperature range	T_j	- 55 ---- + 125								°C	
Storage temperature range	T_{STG}	- 55 ---- + 150								°C	

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal Resistance from Junction to Ambient.375"(9.5mm) lead length.

RATINGS AND CHARACTERISTIC CURVES

FIG.1: FORWARD CURRENT DERATING CURVE

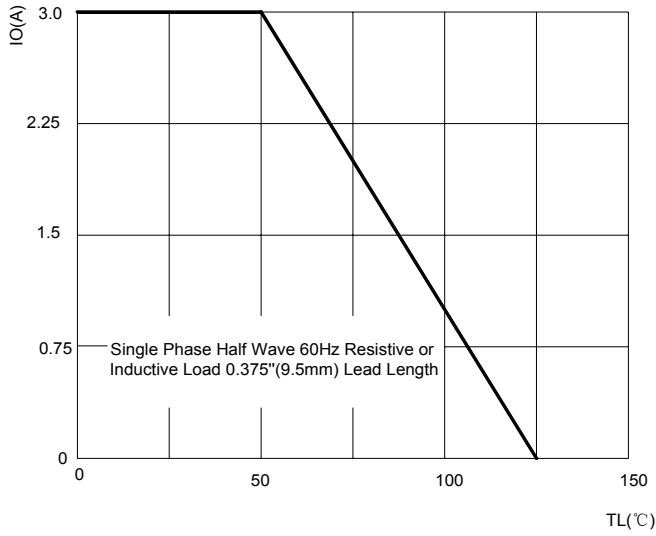


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

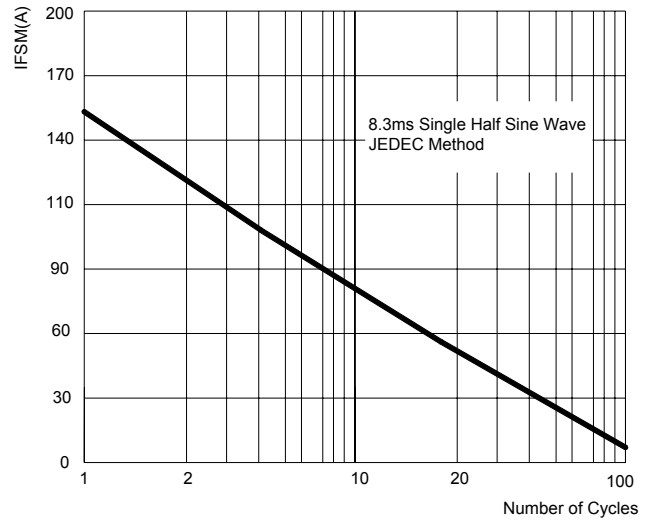


FIG.3: TYPICAL FORWARD CHARACTERISTICS

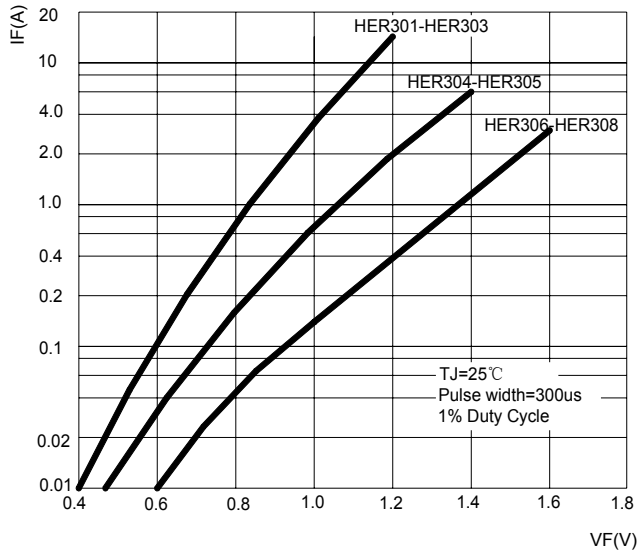


FIG.4: TYPICAL REVERSE CHARACTERISTICS

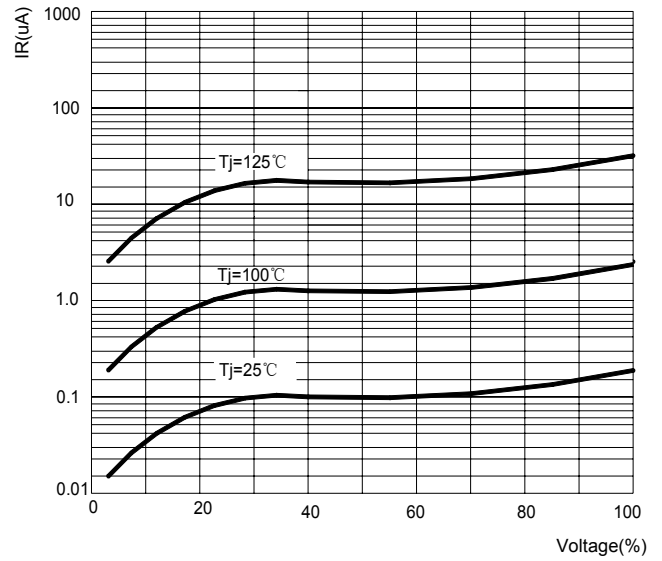


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time

