

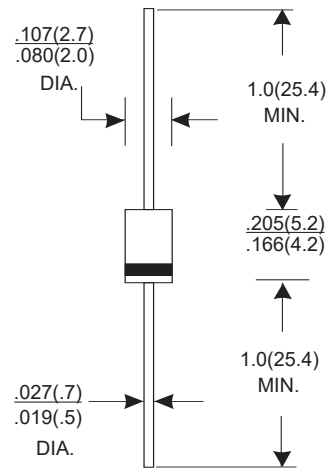
## DO-41 PLASTIC SILICON RECTIFIERS

### FEATURES

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- High speed switching
- Low forward voltage drop
- High forward surge current capability
- Component in accordance to RoHs 2015/863 and WEEE 2012/19/EU

### MECHANICAL DATA

- Case style: DO-41 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
		101	102	103	104	105	106	107	108	
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=50 C	$I_{F(AV)}$	1.0								A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load @Tj=125°C	$I_{FSM}$	30.0								A
Maximum Instantaneous Forward Voltage at 1.0A	$V_F$	1.0		1.3		1.7			V	
Maximum reverse current at rated DC blocking voltage	@T <sub>A</sub> =25°C	5.0								μA
	@T <sub>A</sub> =100°C	150.0								
Maximum reverse recovery time	$t_{rr}$	50				75				ns
Typical junction capacitance (Note1)	$C_J$	20								pF
Typical thermal resistance(Note2)	$R_{\theta JA}$	50								°C/W
Operating junction temperature range	$T_j$	- 55 ---- + 150								°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

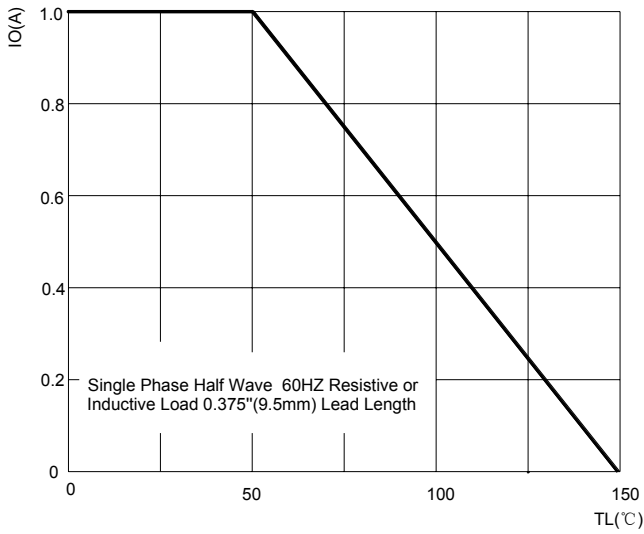


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

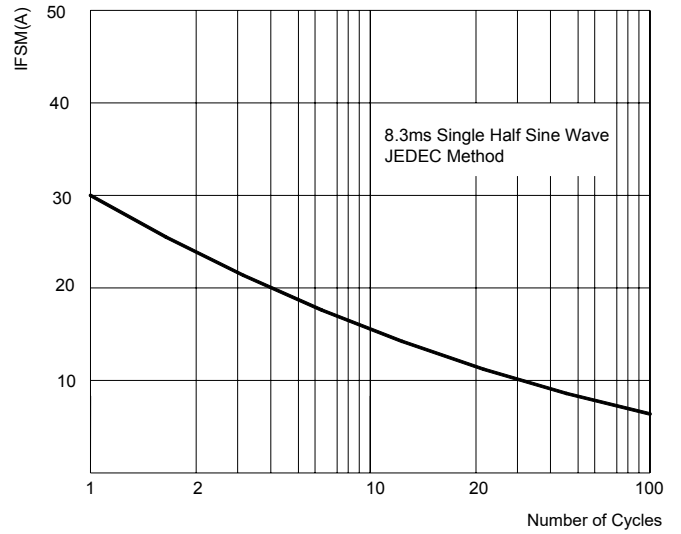


FIG.3: TYPICAL FORWARD CHARACTERISTICS

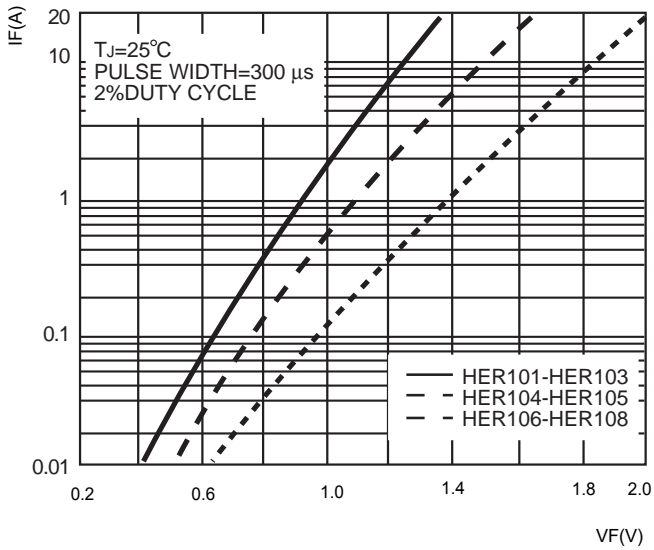


FIG.4: TYPICAL REVERSE CHARACTERISTICS

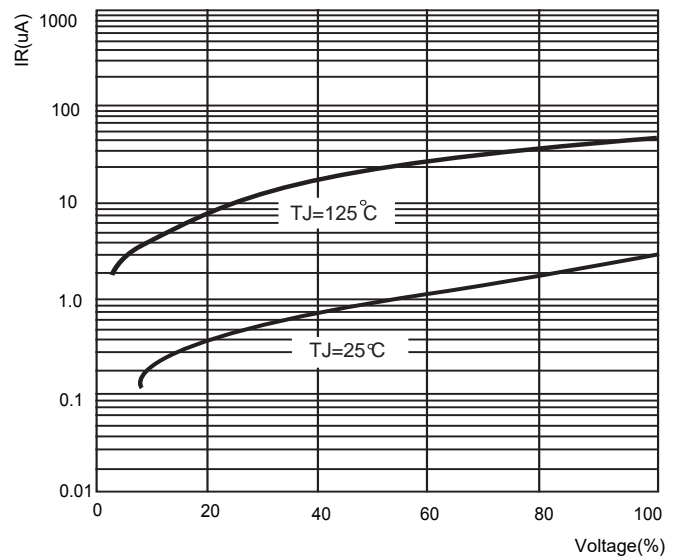


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time

