HFZT

10A05 ------- 10A10

PLASTIC SILICON RECTIFIERS

VOLTAGE RANGE: 50 --- 1000 V CURRENT: 10.0 A

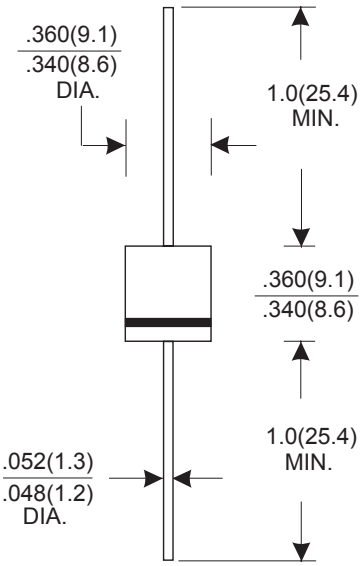
FEATURES

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- Diffusrd Junction
- High forward current capability
- High surge current capability
- Construction utilizes void-free molded plastic technique
- High temperature soldering guaranteed:260℃/10 seconds at terminals
- Component in accordance to RoHs 2002/95/EC and WEEE 2002/96/EC

MECHANICAL DATA

- Case:R-6 molded plastic body
- Terminals:Lead solderable per MIL-STD-750,method 2026
- Polarity:Color band denotes cathode end
- Mounting Position:Any

R-6



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)Single phase,half wave,60 Hz,resistive or inductive load.
For capacitive load,derate by 20%.

Characteristic		SYMBOLS	10A05	10A1	10A2	10A4	10A6	10A8	10A10	UNITS
Maximum recurrent peak reverse voltage Working peak reverse voltage DC blocking voltage		V_{RRM} V_{RMS} V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage		$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average rectified output current(Note 1)@TA=50℃		$I_{O(AV)}$	10.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load(JEDECmethod)		I_{FSM}	600.0							A
Forward Voltage @IF=10A		V_F	1.0							V
Peak Reverse Current at rated DC blocking voltage	@T_A=25	I_{RM}	10.0							μA
	@T_A=100		100.0							
Typical Junction Capacitance(Note 2)		C_J	150			80				pF
Typical Thermal Resistance Junction to Ambient (Note 1)		$R_{\theta JA}$	10							℃/W
Operating Temperature Range		T_j	-50 to+150							℃
Storage Temperature Range		T_{STG}								

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-TYPICAL FORWARD CHARACTERISTICS

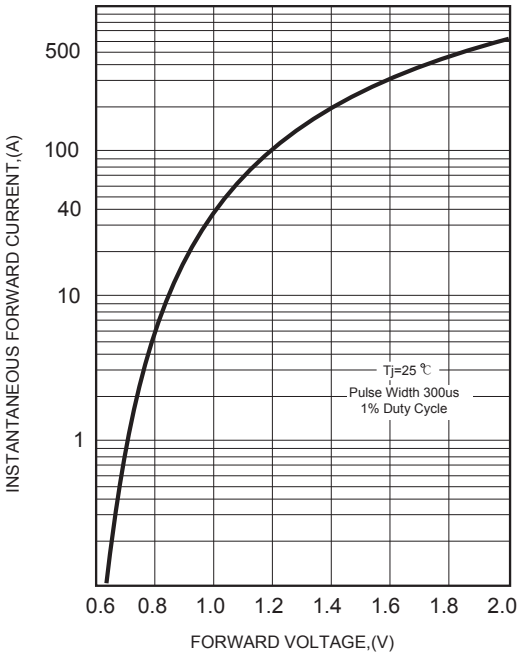


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

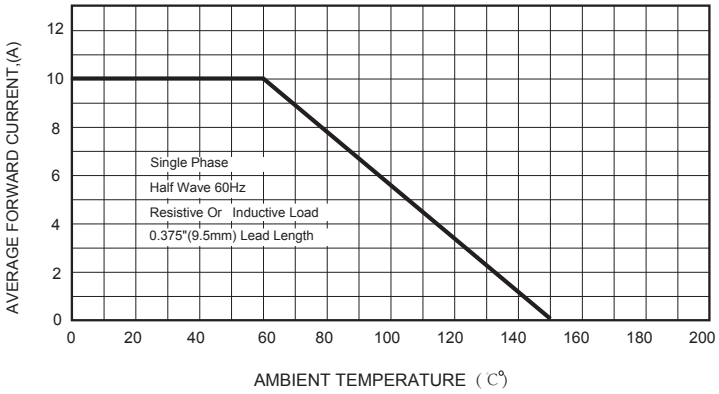


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

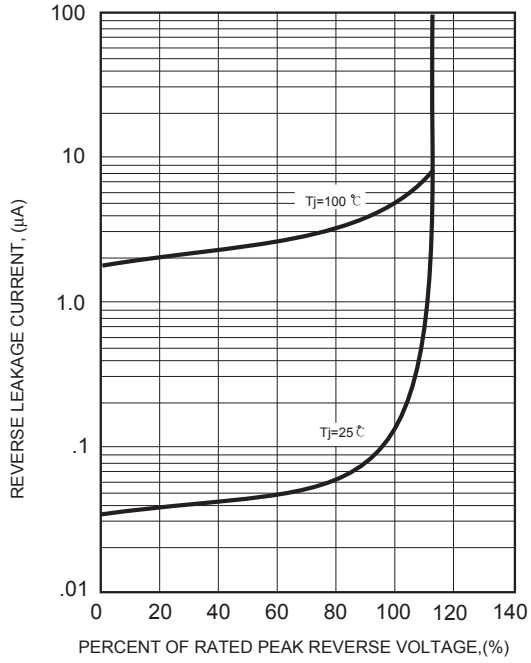


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

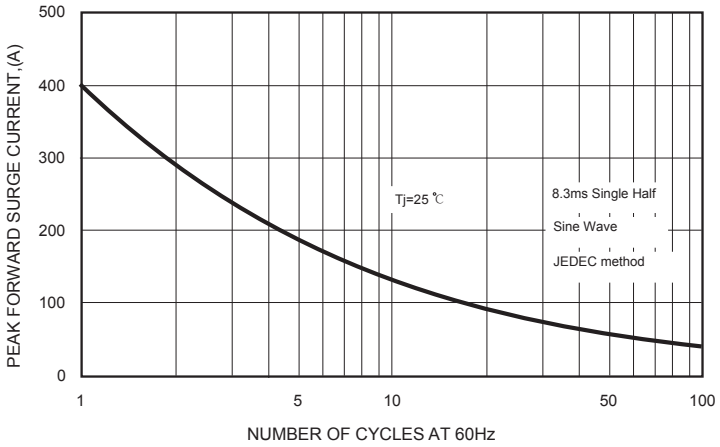


FIG.5 -TYPICAL THERMAL RESISTANCE VS. LEAD LENGTH