TAYCHIPST

PLASTIC SILICON RECTIFIER

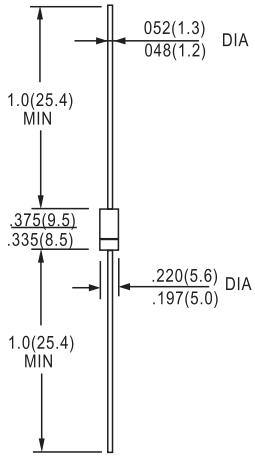
ERD32-02 THRU ERD32-04

200V-400V 3.0A

FEATURES

- Low cost
- Diffused junction
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with Freon,Alcohol,Isopropanol and similar solvents
- The plastic material carries U/L recognition 94V-0

DO-27



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case:JEDEC DO--27,molded plastic
Terminals: Axial lead ,solderable per MIL- STD-202,Method 208
Polarity: Color band denotes cathode
Weight: 0.041 ounces,1.15 grams
Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase,half wave,60 Hz,resistive or inductive load. For capacitive load,derate by 20%.

		ERD03 -02	ERD03 -04	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	200	400	V
Maximum RMS voltage	V_{RMS}	140	280	V
Maximum DC blocking voltage	V_{DC}	200	400	V
Maximum average forward rectified current 9.5mm lead length, @T_A=75℃	$I_{F(AV)}$	3.0		A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @T_J=125℃	I_{FSM}	200.0		A
Maximum instantaneous forward voltage @ 3.0 A	V_F	1.0		V
Maximum reverse current @T_A=25℃ at rated DC blocking voltage @T_A=100℃	I_R	10.0 100.0		μA
Typical junction capacitance (Note1)	C_J	35		pF
Typical thermal resistance (Note2)	$R_{\theta JA}$	20		℃/W
Operating junction temperature range	T_J	-55----+150		℃
Storage temperature range	T_{STG}	-55----+150		℃

NOTE: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal resistance from junction to ambient.

RATINGS AND CHARACTERISTIC CURVES ERD32-02 THRU ERD32-04

FIG.1 – TYPICAL FORWARD CHARACTERISTIC

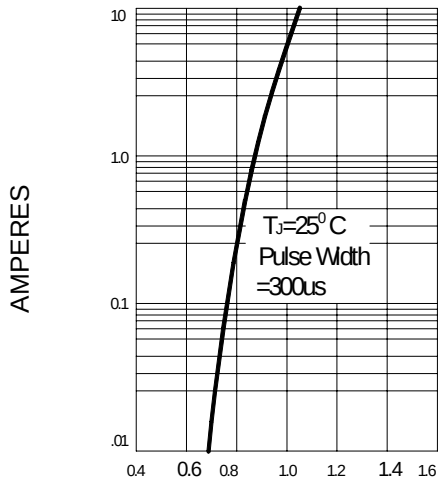


FIG.2 – TYPICAL JUNCTION CHARACTERISTICS

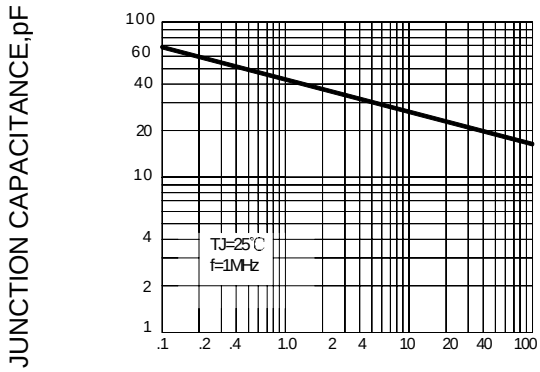


FIG.3 – FORWARD DERATING CURVE

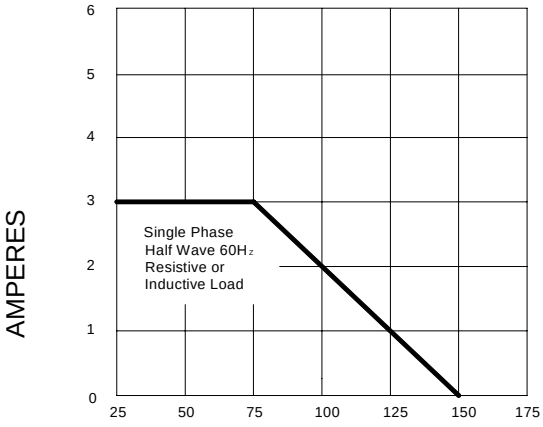


FIG.4 – PEAK FORWARD SURGE CURRENT