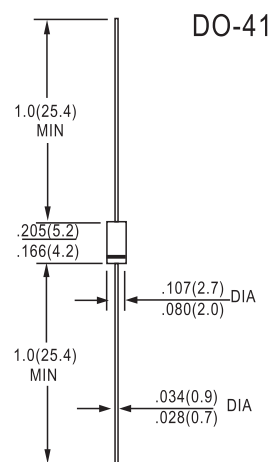


FEATURES

- 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

MECHANICAL DATA

- Case: JEDEC DO-41, molded plastic
- Terminals: Axial lead, solderable per MIL-STD-202, Method 208
- Polarity: Color band denotes cathode
- Weight: 0.012 ounces, 0.34 grams
- Mounting position: Any



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

		ERA15-01	ERA15-02	ERA15-04	ERA15-06	ERA15-08	ERA15-10	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	100	200	400	600	800	1000	V
Maximum average forward rectified current 9.5mm lead length, @ $T_A = 75^\circ\text{C}$	$I_{F(AV)}$	1.0						A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @ $T_J = 125^\circ\text{C}$	I_{FSM}	40.0						A
Maximum instantaneous forward voltage @ 1.0 A	V_F	1.0						V
Maximum reverse current @ $T_A = 25^\circ\text{C}$ at rated DC blocking voltage @ $T_A = 100^\circ\text{C}$	I_R	5.0 50.0						μA
Typical junction capacitance (Note1)	C_J	15						pF
Typical thermal resistance (Note2)	$R_{\theta JA}$	50						$^\circ\text{C/W}$
Operating junction temperature range	T_J	- 55 ---- + 150						$^\circ\text{C}$
Storage temperature range	T_{STG}	- 55 ---- + 150						$^\circ\text{C}$

NOTE: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Thermal resistance from junction to ambient.



TAYCHIPST

PLASTIC SILICON RECTIFIER

ERA15-01 THRU ERA15-10

50V-1000V 1.0A

RATINGS AND CHARACTERISTICS CURVES

ERA15-01 THRU ERA15-10

FIG.1 – TYPICAL FORWARD CHARACTERISTIC

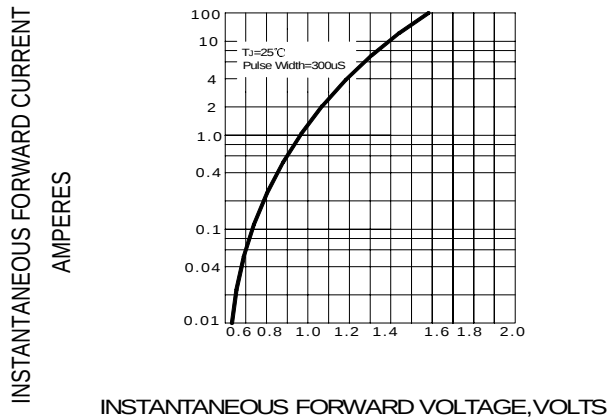


FIG.2 – TYPICAL JUNCTION CAPACITANCE

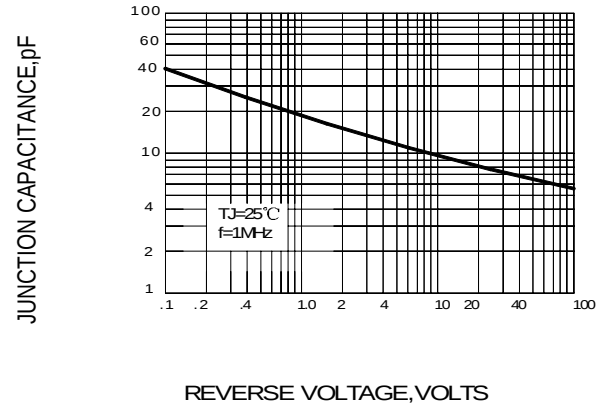


FIG.3 – PEAK FORWARD SURGE CURRENT

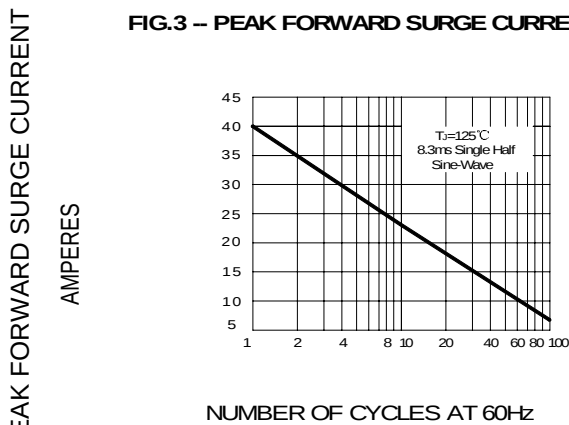


FIG.4 – FORWARD DERATING CURVE

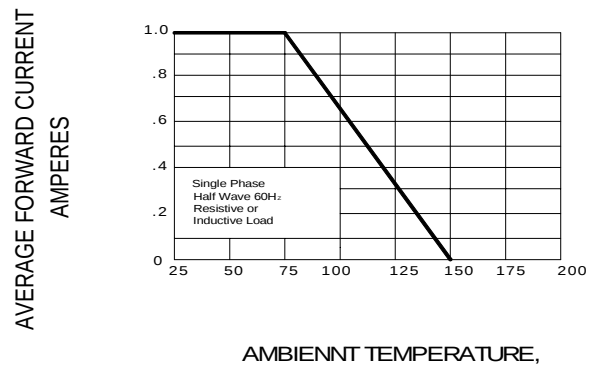


FIG.5 – TYPICAL FORWARD CHARACTERISTIC

