

**TAYCHIPST****PLASTIC SILICON RECTIFIER****ERC05-06 THRU ERC05-08****600V-800V 1.2A****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-15, molded plastic

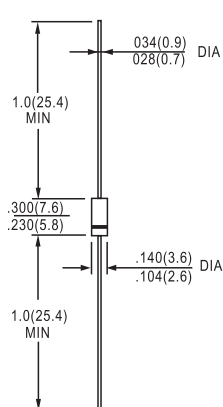
Terminals: Axial lead, solderable per

MIL-STD-202, Method 208

Polarity: Color band denotes cathode

Weight: 0.014 ounces, 0.39 grams

Mounting position: Any



DO-15

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%.

		ERC05-06	ERC05-08	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	600	800	V
Maximum RMS voltage	V_{RMS}	420	560	V
Maximum DC blocking voltage	V_{DC}	600	800	V
Maximum average forward rectified current 9.5mm lead length, @ $T_A = 75^\circ\text{C}$	$I_{F(AV)}$	1.2		A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @ $T_J = 125^\circ\text{C}$	I_{FSM}	100.0		A
Maximum instantaneous forward voltage @ 1.2 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	20		pF
Typical thermal resistance (Note2)	$R_{\theta JA}$	40		$^\circ\text{C}/\text{W}$
Operating junction temperature range	T_J	-55----+150		$^\circ\text{C}$
Storage temperature range	T_{STG}	-55----+150		$^\circ\text{C}$

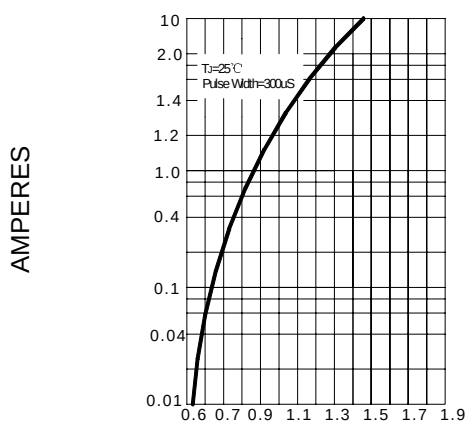
NOTE: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Thermal resistance from junction to ambient.

RATINGS AND CHARACTERISTIC CURVES

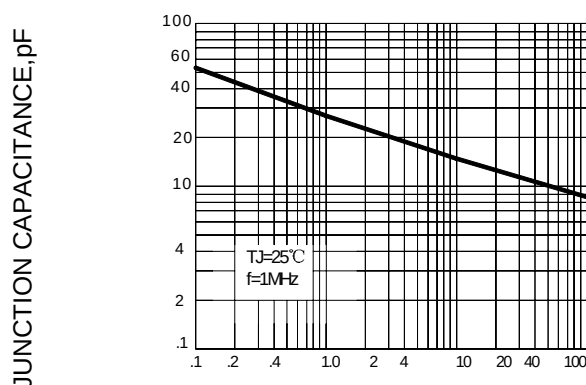
ERC05-06 THRU ERC05-08

FIG.1 – FORWARD CHARACTERISTIC



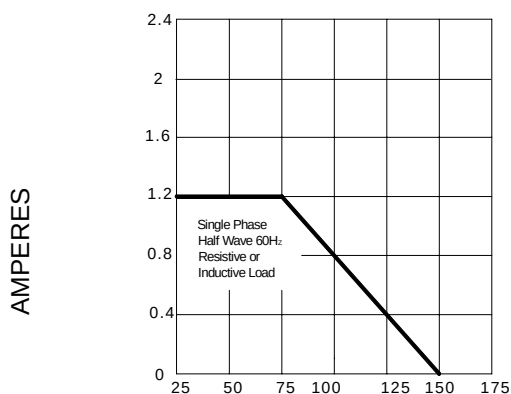
INSTANTANEOUS FORWARD VOLTAGE, VOLTS

FIG.2 – JUNCTION CHARACTERISTICS



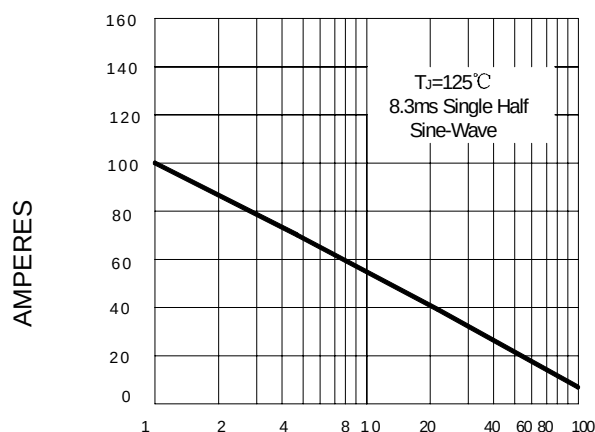
REVERSE VOLTAGE, VOLTS

FIG.3 – FORWARD DERATING CURVE



AMBIENT TEMPERATURE, °C

FIG.4 – PEAK FORWARD SURGE CURRENT



NUMBER OF CYCLES AT 60Hz