

PLASTIC SILICON RECTIFIERS	REVERSE VOLTAGE - 50 to 1000 Volts FORWARD CURRENT - 10.0 Amperes
<p><b>FEATURES</b></p> <ul style="list-style-type: none"> <li>● Low cost</li> <li>● Diffused junction</li> <li>● Low forward voltage drop</li> <li>● Low reverse leakage current</li> <li>● High current capability</li> <li>● The plastic material carries UL recognition 94V-0</li> </ul> <p><b>MECHANICAL DATA</b></p> <ul style="list-style-type: none"> <li>● Case: JEDEC R-6 molded plastic</li> <li>● Polarity: Color band denotes cathode</li> <li>● Weight: 0.07 ounces , 2.1 grams</li> <li>● Mounting position: Any</li> </ul>	<p><b>R - 6</b></p> <p>Dimensions in inches and (millimeters)</p>

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

CHARACTERISTICS	SYMBOL	10A05	10A1	10A2	10A4	10A6	10A8	10A10	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ T <sub>A</sub> =60°C	I <sub>(AV)</sub>	10.0							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I <sub>FSM</sub>	400							A
Maximum Forward Voltage at 10A DC	V <sub>F</sub>	1.0							V
Maximum DC Reverse Current @ T <sub>J</sub> =25°C at Rated DC Blocking Voltage @ T <sub>J</sub> =100°C	I <sub>R</sub>	10 100							μA
Typical Junction Capacitance (Note1)	C <sub>J</sub>	150							pF
Typical Thermal Resistance (Note2)	R <sub>θJC</sub>	6.0							°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C

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

2.Thermal resistance junction to case.

REV. 1, 30-Dec-2011

FIG. 1 – FORWARD CURRENT DERATING CURVE

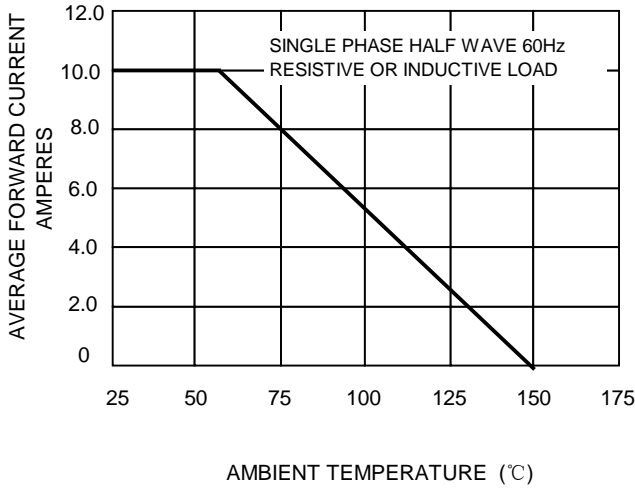


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

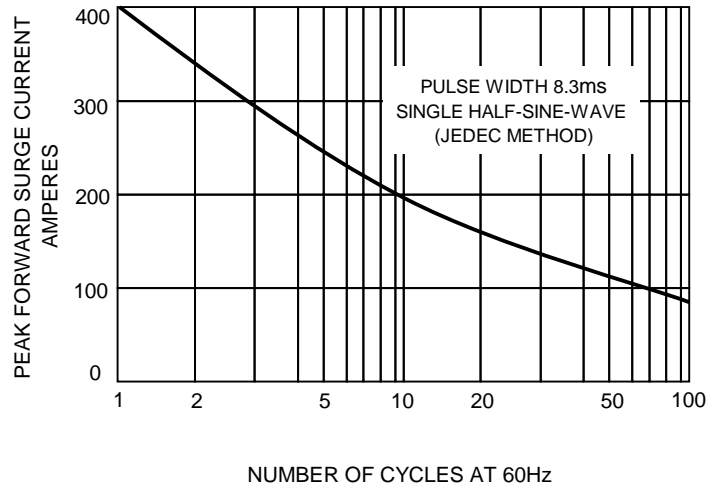


FIG.3 – TYPICAL JUNCTION CAPACITANCE

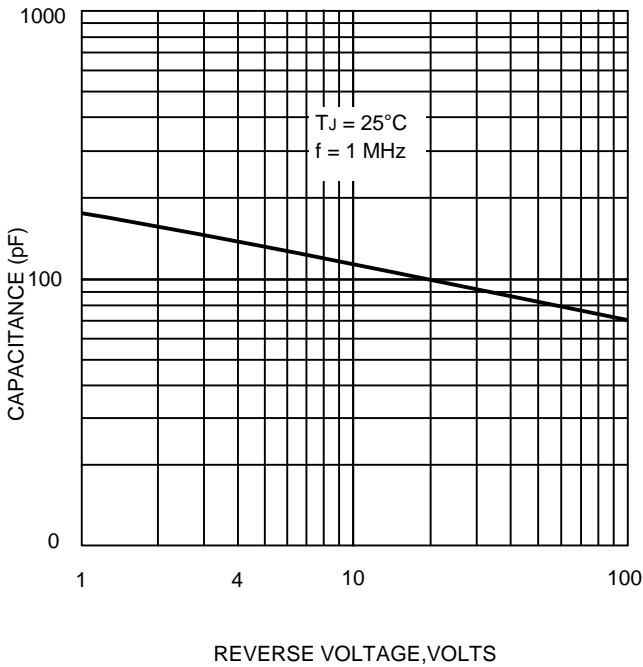


FIG.4-TYPICAL FORWARD CHARACTERISTICS

