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| PLASTIC SILICON RECTIFIERS | REVERSE VOLTAGE - 50 to 1200 Volts FORWARD CURRENT - 10.0 Amperes |
| <p>FEATURES</p> <ul style="list-style-type: none"> ● Low cost ● Diffused junction ● Low forward voltage drop ● Low reverse leakage current ● High current capability ● The plastic material carries UL recognition 94V-0 <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> ● Case: JEDEC R-6 molded plastic ● Polarity: Color band denotes cathode ● Weight: 0.07 ounces , 2.1 grams ● Mounting position: Any | <p>R - 6</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 | 10A12 | UNIT |
|--|-------------------|-------------|------|------|------|------|------|-------|------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 900 | V |
| Maximum DC Blocking Voltage | V _{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1200 | V |
| Maximum Average Forward Rectified Current @T _A =60°C | I _(AV) | 10.0 | | | | | | | A |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method) | I _{FSM} | 400 | | | | | | | A |
| Maximum Forward Voltage at 10A DC | V _F | 1.0 | | | | | | | V |
| Maximum DC Reverse Current @T _J =25°C at Rated DC Blocking Voltage @T _J =100°C | I _R | 10 100 | | | | | | | μA |
| Typical Junction Capacitance (Note1) | C _J | 150 | | | | | | | pF |
| Typical Thermal Resistance (Note2) | R _{θJC} | 6.0 | | | | | | | °C/W |
| Operating Temperature Range | T _J | -55 to +125 | | | | | | | °C |
| Storage Temperature Range | T _{STG} | -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.

RATING AND CHARACTERISTIC CURVES

10A05 thru 10A12

FIG. 1 – FORWARD CURRENT DERATING CURVE

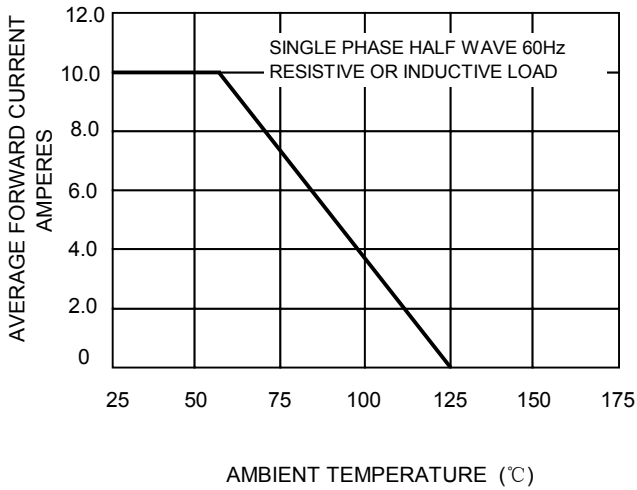


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

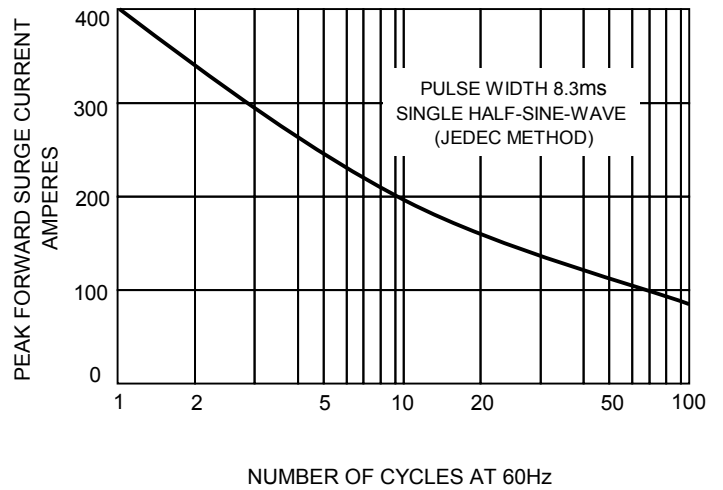


FIG.3 – TYPICAL JUNCTION CAPACITANCE

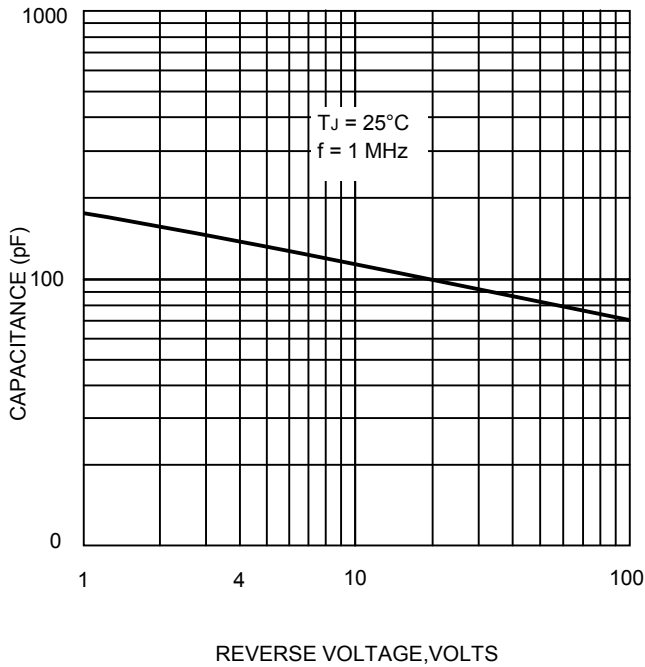


FIG.4-TYPICAL FORWARD CHARACTERISTICS

