

# I. General Purpose Rectifier

## 10.0A Silicon Rectifier 10A05~10A10

(Package: R-6)

<p><b><u>FEATURES</u></b></p> <ul style="list-style-type: none"> <li>• The plastic package carries Underwriters Laboratory Flammability Classification 94V-0</li> <li>• Low reverse leakage</li> <li>• High forward surge current capability</li> <li>• Construction utilizes void-free molded plastic technique</li> </ul> <p><b><u>MECHANICAL DATA</u></b></p> <ul style="list-style-type: none"> <li>• Case : R-6 molded plastic body</li> <li>• Terminals : Plated axial leads, solderable per MIL-STD-202, Method 208 guaranteed</li> <li>• Polarity : Color band denotes cathode end</li> <li>• Weight : 1.65 grams</li> </ul>	<p>Case: R-6 Dimensions in inches and (millimeters)</p>
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## Ratings & Electrical Characteristics

Characteristic	Symbol	10A05	10A1	10A2	10A4	10A6	10A8	10A10	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_a = 60$	$I_o$	10.0							Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	400.0							Amps
Maximum instantaneous forward voltage at 10.0A	$V_F$	1.00							Volts
Maximum DC reverse current $T_a = 25$ at rated DC blocking voltage $T_a = 100$	$I_R$	10.0 400							$\mu A$
Typical junction capacitance (Note 1)	$C_j$	100							pF
Typical thermal resistance (Note 2)	Rth-JA	10.0							/ W
Operating junction and storage temperature range	$T_j, T_{stg}$	-65 to +150							

Note :

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal resistance from junction to ambient at 0.375"(9.5mm) lead length, P.C.B mounted

<http://patron-components.com/>

# Ratings and Characteristic Curves of 10A05~10A10

FIG.1-TYPICAL FORWARD CHARACTERISTICS

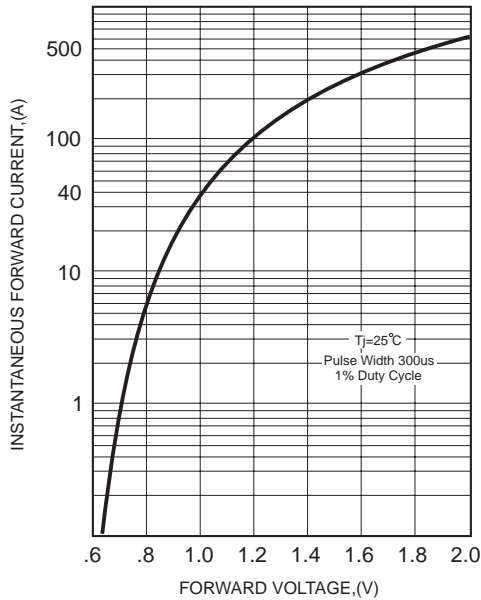


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

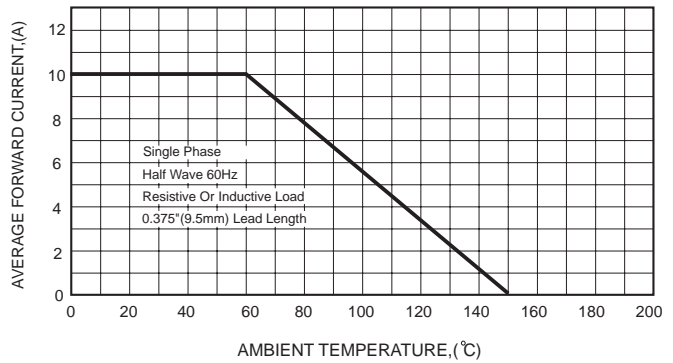


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

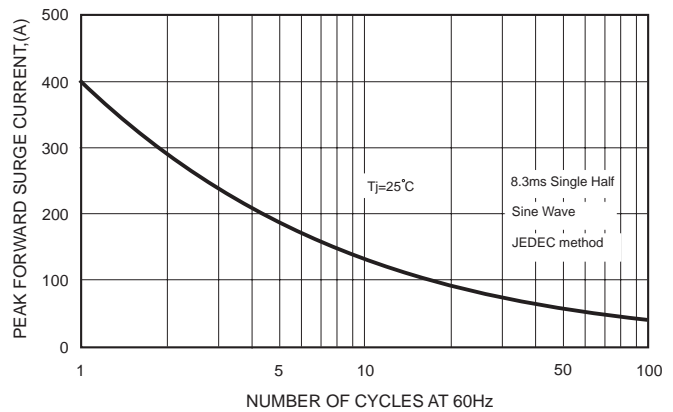


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

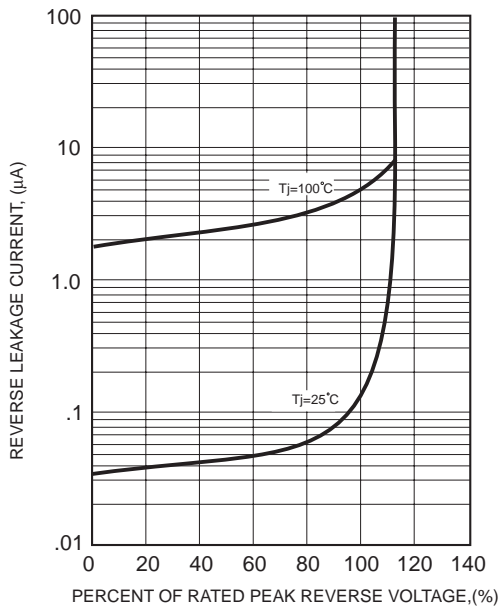


FIG.5 - TYPICAL THERMAL RESISTANCE VS. LEAD LENGTH

