

# 10A05 THRU 10A10

## GENERAL PURPOSE PLASTIC RECTIFIERS

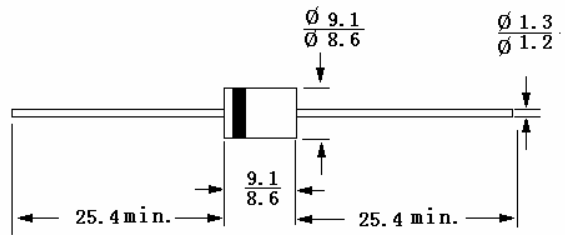
Reverse Voltage – 50 to 1000 Volts

Forward Current – 10.0 Amperes

R-6

### Features

- Low cost
- Diffused junction
- Low forward voltage drop
- Low reverse leakage current
- High current capability
- The plastic material carries UL recognition 94V-0



Dimensions in mm

### Mechanical Data

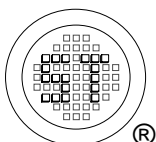
- **Case:** JEDEC R-6 molded plastic
- **Polarity:** Color band denotes cathode
- **Mounting position:** Any

### Absolute Maximum Ratings and Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.. For capacitive load, derate current by 20%.

	Symbols	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 @ $T_A=50^{\circ}C$	$I_{F(AV)}$	10							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	600							Amps
Maximum forward voltage at 10A DC	$V_F$	1							Volts
Maximum DC reverse current @ $T_J = 25^{\circ}C$ at rated DC blocking voltage @ $T_J = 100^{\circ}C$	$I_R$	10 100							$\mu A$
Typical junction capacitance (Note 1)	$C_J$	150							pF
Typical thermal resistance (Note 2)	$R_{\theta JA}$	10							$^{\circ}C/W$
Operating temperature range	$T_J$	-55 to +125							$^{\circ}C$
Storage temperature range	$T_S$	-55 to +150							$^{\circ}C$

- Notes: 1. Measured at 1 MHz and applied reverse voltage of 4V D.C.  
2. Thermal Resistance Junction to Ambient.



**SEMTECH ELECTRONICS LTD.**

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