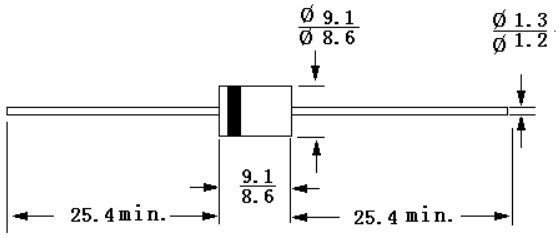
10A05 THRU 10A10

GENERAL PURPOSE PLASTIC RECTIFIERS
Reverse Voltage – 50 to 1000 Volts
Forward Current – 10.0 Amperes

R-6



Dimensions in mm

Features

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

Mechanical Data

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

Absolute Maximum Ratings and Characteristics

Ratings at 25^{0}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 ^{O}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 ^{O}C at rated DC blocking voltage @T_J = 100^{O}C	I_R	10 100							µA
Typical junction capacitance (Note 1)	C_J	150							pF
Typical thermal resistance (Note 2)	$R_{\theta JA}$	10							^{O}C/W
Operating temperature range	T_J	-55 to+125							^{O}C
Storage temperature range	T_S	-55 to+150							^{O}C

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