

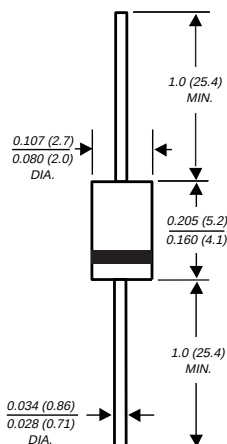
SRP100A THRU SRP100K

FAST SWITCHING PLASTIC RECTIFIER

Reverse Voltage - 50 to 800 Volts

Forward Current - 1.0 Ampere

DO-204AL



Dimensions in inches and (millimeters)

FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ High surge current capability
- ◆ Construction utilizes void-free molded plastic technique
- ◆ 1.0 Ampere operation at $T_A=55^\circ\text{C}$ with no thermal runaway
- ◆ Fast switching for high efficiency
- ◆ High temperature soldering guaranteed: $250^\circ\text{C}/10$ seconds 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: JEDEC DO-204AL molded plastic body

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color Band denotes cathode end

Mounting Position: Any

Weight: 0.012 ounce, 1.3 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	SRP 100A	SRP 100B	SRP 100D	SRP 100G	SRP 100J	SRP 100K	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	Volts
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	Volts
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at T _A =55°C	I _(AV)	1.0						Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) at T _A =75°C	I _{FSM}	30.0						Amps
Maximum instantaneous forward voltage at 1.0A	V _F	1.3						Volts
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	10.0 200.0						μA
Maximum reverse recovery time (NOTE 1)	t _{rr}	100				200		ns
Typical junction capacitance (NOTE 2)	C _J	12.0						pF
Typical thermal resistance (NOTE 3)	R _{θJA}	41.0						°C/W
Operating junction temperature range	T _J	-50 to +125						°C
Storage temperature range	T _{STG}	-50 to +150						°C

NOTES:

(1) Reverse recovery test conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

(3) Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

RATINGS AND CHARACTERISTIC CURVES SRP100A THRU SRP100K

