

VOLTAGE RANGE: 50 - 800V

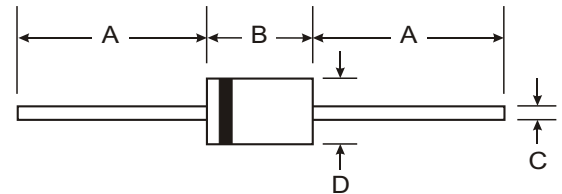
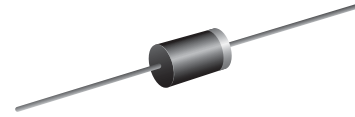
CURRENT: 1.0 A

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: D O - 4 1 Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.34 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



DO-41 Plastic		
Dim	Min	Max
A	25.40	—
B	4.06	5.21
C	0.71	0.864
D	2.00	2.72
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	SRP 100A	SRP 100B	SRP 100D	SRP 100G	SRP 100J	SRP 100K	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A=55^\circ\text{C}$	$I_{(AV)}$	1.0						A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) at $T_A=75^\circ\text{C}$	I_{FSM}	30.0						A
Maximum instantaneous forward voltage at 1.0A	V_F	1.3						V
Maximum DC reverse current at rated DC blocking voltage	I_R	$T_A=25^\circ\text{C}$: 10.0 $T_A=100^\circ\text{C}$: 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)	$R_{\theta JA}$	41.0						$^\circ\text{C}/\text{W}$
Operating junction temperature range	T_J	-50 to +125						$^\circ\text{C}$
Storage temperature range	T_{STG}	-50 to +150						$^\circ\text{C}$

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

