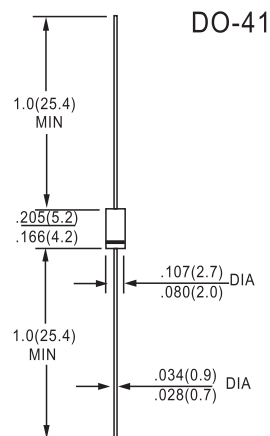


**TAYCHIPST****FAST SWITCHING PLASTIC RECTIFIER****SRP600A THRU SRP600K****50V-800V 6.0A****FEATURES**

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ High surge current capability
- ◆ Construction utilizes void-free molded plastic technique
- ◆ Fast switching for high efficiency
- ◆ High temperature soldering guaranteed:
250°C/10 seconds, 0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension

MECHANICAL DATA**Case:** Void-free molded package body**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026**Polarity:** Color band denotes cathode end**Mounting Position:** Any**Weight:** 0.07 ounce, 2.1 grams

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	SRP 600A	SRP 600B	SRP 600D	SRP 600G	SRP 600J	SRP 600K	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)	6.0						Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	300.0						Amps
Maximum instantaneous forward voltage at 6.0A	V _F	1.3						Volts
Maximum DC reverse current at rated DC blocking voltage	I _R	10.0 1.0						μA mA
Maximum reverse recovery time (NOTE 1)	t _{rr}	100	100	150	150	200	200	ns
Typical junction capacitance (NOTE 2)	C _J	300.0						pF
Typical thermal resistance (NOTE 3)	R _{θJA}	10.0						°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=0.5A, I_R=1.0A, I_{rr}=0.25A

(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, with both leads equally to heat sink



TAYCHIPST

FAST SWITCHING PLASTIC RECTIFIER

SRP600A THRU SRP600K

50V-800V 6.0A

RATINGS AND CHARACTERISTIC CURVES

SRP600A THRU SRP600K

FIG. 1 - FORWARD CURRENT DERATING CURVE

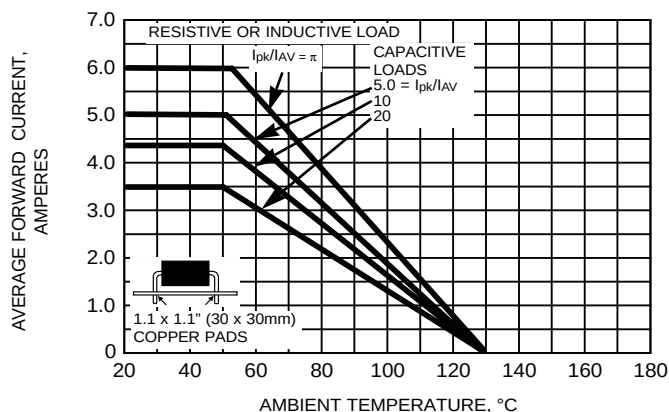


FIG. 2 - FORWARD CURRENT DERATING CURVE

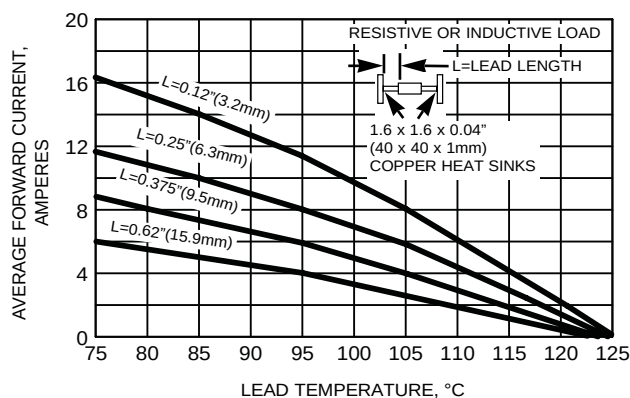


FIG. 3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

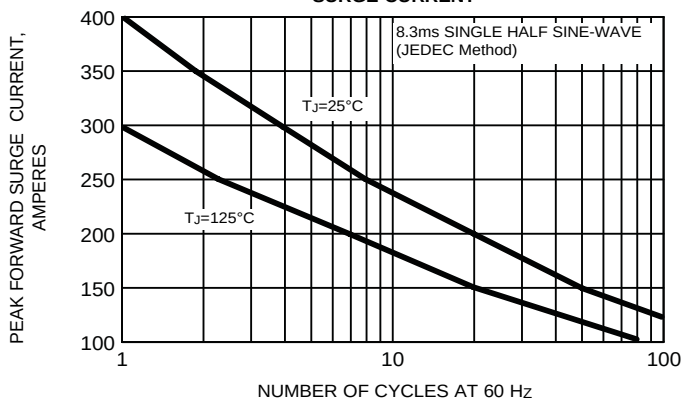


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

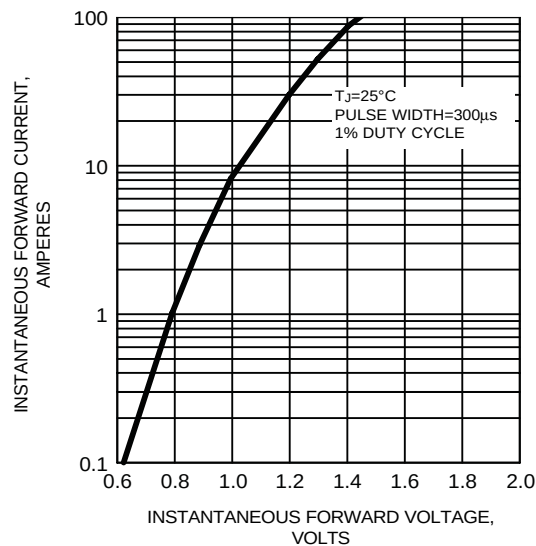


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS

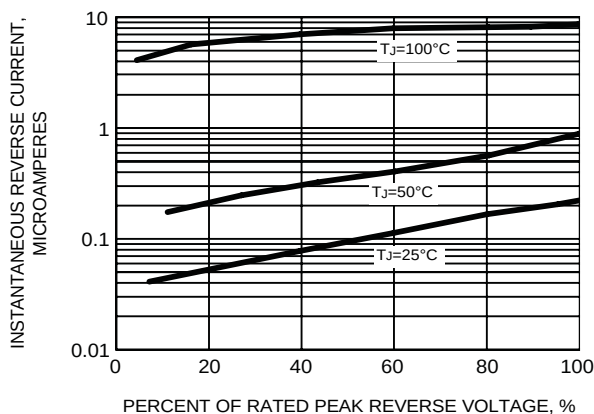


FIG. 6 - TYPICAL THERMAL RESISTANCE

