

D²PAK



RoHS COMPLIANCE

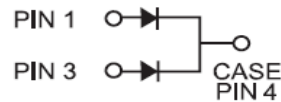
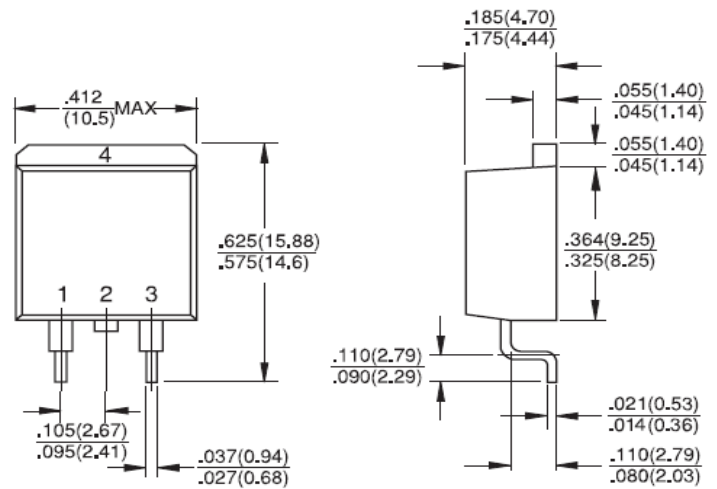


Features

- ✧ UL Recognized File #E-326854
- ✧ For surface mounted application
- ✧ Low forward voltage drop
- ✧ High current capability
- ✧ High reliability
- ✧ High surge current capability
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode

Mechanical Data

- ✧ Case: D²PAK molded plastic
- ✧ Epoxy: UL 94V-0 rate flame retardant
- ✧ Terminals: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity: As marked
- ✧ High temperature soldering guaranteed: 260°C/10 seconds at terminals
- ✧ Weight: 1.35 grams



Dimensions in inches and (millimeters)

Marking Diagram



- SRS16XX = Specific Device Code
- G = Green Compound
- Y = Year
- WW = Work Week

Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	Symbol	SRS 1620	SRS 1630	SRS 1640	SRS 1650	SRS 1660	SRS 1690	SRS 16100	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	90	100	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	63	70	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	90	100	V
Maximum Average Forward Rectified Current	I _{F(AV)}	16							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	150							A
Maximum Instantaneous Forward Voltage (Note 1) @8A	V _F	0.55			0.70		0.90		V
Maximum Reverse Current @ Rated VR T _A =25 °C T _A =100 °C T _A =125 °C	I _R	0.5					0.1		mA
		15			10		-		
		-					5		
Typical Junction Capacitance (Note 2)	C _j	700			460		320		pF
Typical Thermal Resistance Per Leg	R _{θJC}	2							°C/W
Operating Temperature Range	T _J	- 65 to + 125			- 65 to + 150				°C
Storage Temperature Range	T _{STG}	- 65 to + 150							°C

Note 1: Pulse Test with PW=300u sec, 1% Duty Cycle

Note 2: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVES (SRS1620 THRU SRS16100)

FIG. 1 FORWARD CURRENT DERATING CURVE

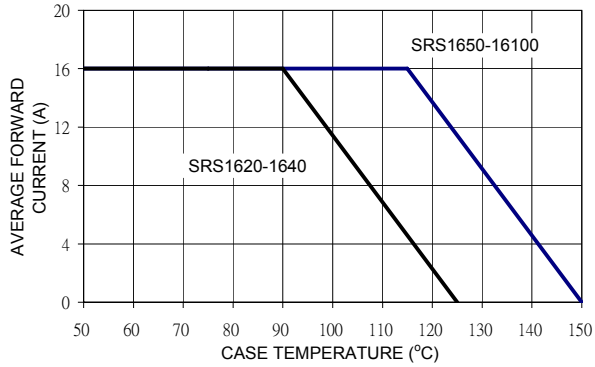


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

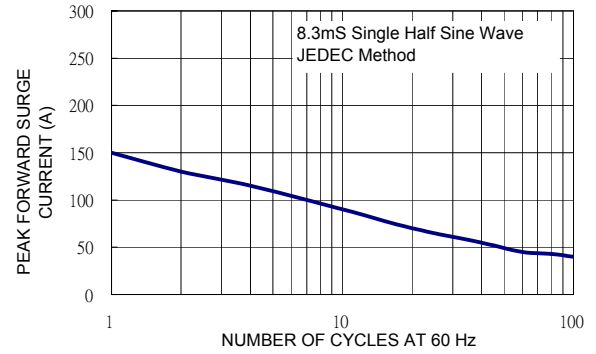


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

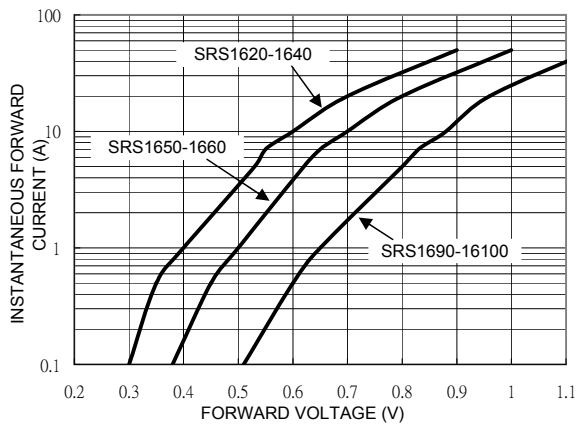


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG

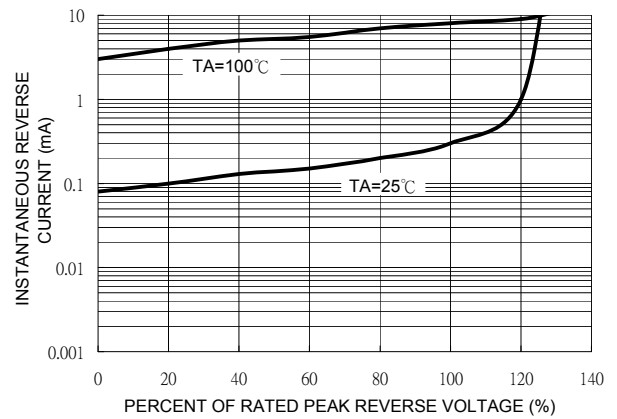


FIG. 5 TYPICAL JUNCTION CAPACITANCE PER LEG

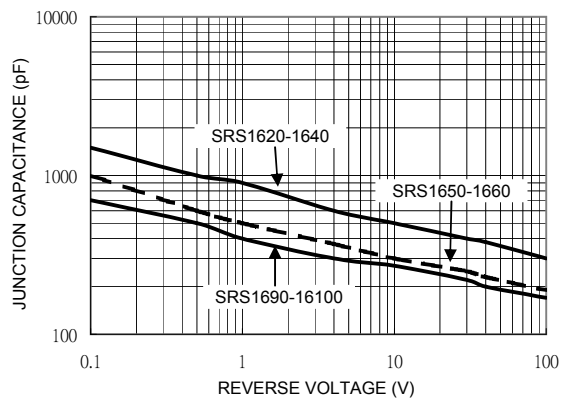
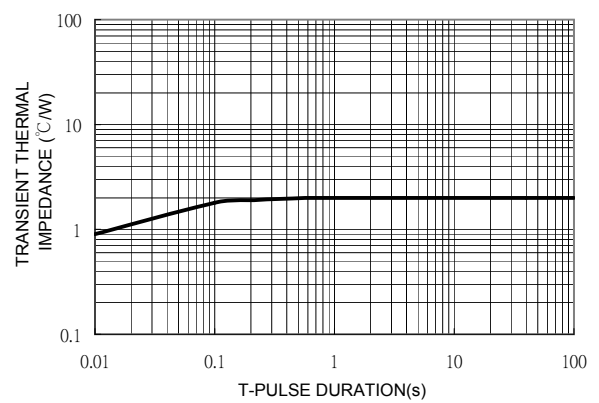


FIG. 6 TYPICAL TRANSIENT THERMAL IMPEDANCE PER LEG



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