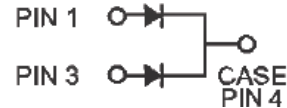
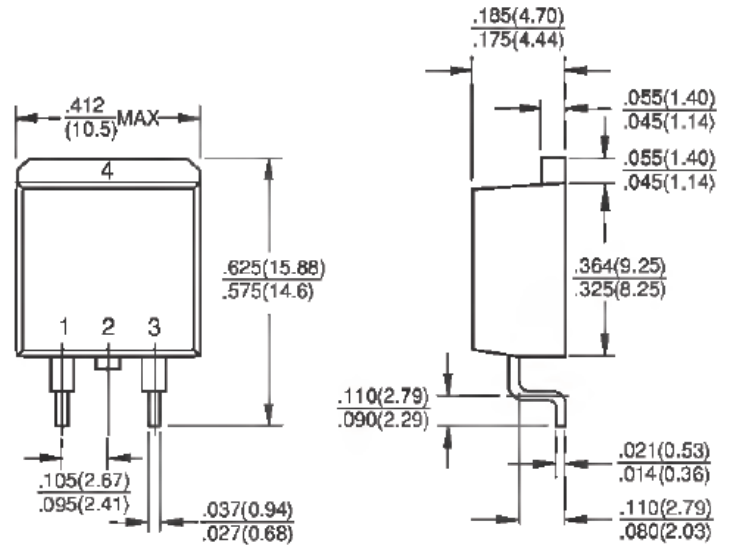


**10.0AMPS. Surface Mount Schottky Barrier Rectifiers  
D<sup>2</sup>PAK**



**Features**

- ✧ UL Recognized File #E-326854
- ✧ For surface mounted application
- ✧ Ideal for automated pick & place
- ✧ Low power loss, high efficiency
- ✧ High current capability, Low VF
- ✧ High reliability
- ✧ Epitaxial construction
- ✧ Guard-ring for transient protection
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode



**Mechanical Data**

- ✧ Case: D<sup>2</sup>PAK molded plastic
- ✧ Epoxy: UL 94V-0 rate flame retardant
- ✧ Terminals: Pure tin plated, leads soldweable 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**



- SRS10XX = 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 1020	SRS 1030	SRS 1040	SRS 1050	SRS 1060	SRS 1090	SRS 10100	SRS 10150	Unit
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	90	100	150	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	63	70	105	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	90	100	150	V
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub>	10								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load	I <sub>FSM</sub>	120								A
Maximum Instantaneous Forward Voltage (Note 1) @ 5.0A	V <sub>F</sub>	0.55		0.70		0.90		1.00		V
Maximum Reverse Current @ Rated VR T <sub>A</sub> =25 °C T <sub>A</sub> =100 °C T <sub>A</sub> =125 °C	I <sub>R</sub>	0.5				0.1				mA
		15		10		-				
		-				5				
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	400								pF
Typical Thermal Resistance	R <sub>θJC</sub>	2								°C/W
Operating Temperature Range	T <sub>J</sub>	- 65 to + 125				- 65 to + 150				°C
Storage Temperature Range	T <sub>STG</sub>	- 55 to + 150								°C

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

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

## RATINGS AND CHARACTERISTIC CURVES (SRS1020 THRU SRS10150)

FIG.1 FORWARD CURRENT DERATING CURVE

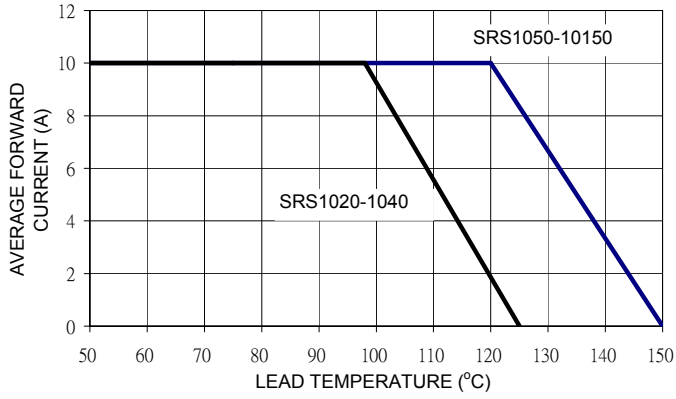


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

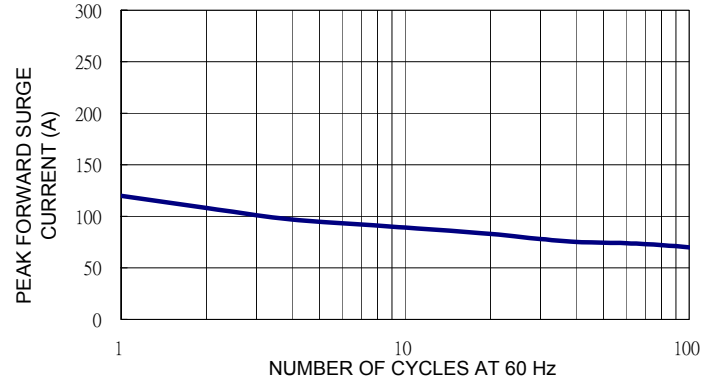


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

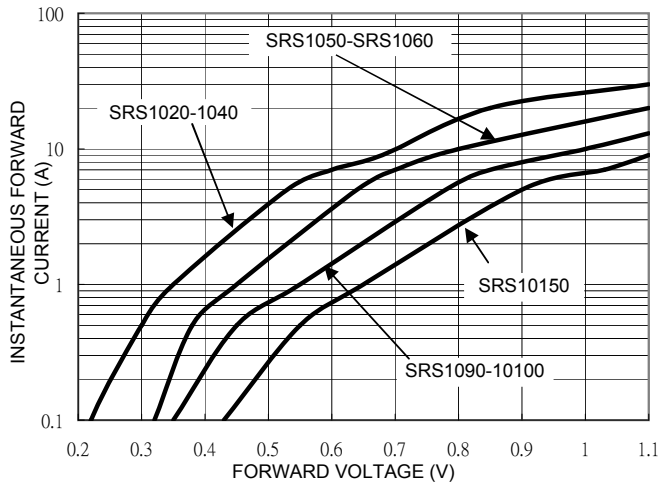


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

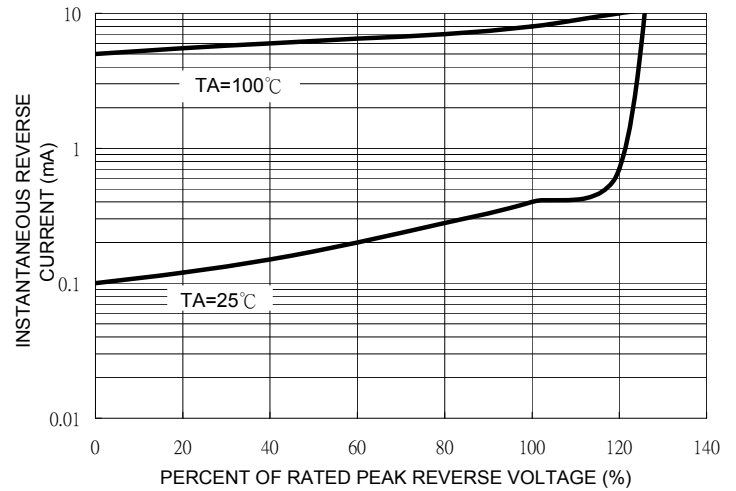


FIG. 5 TYPICAL JUNCTION CAPACITANCE

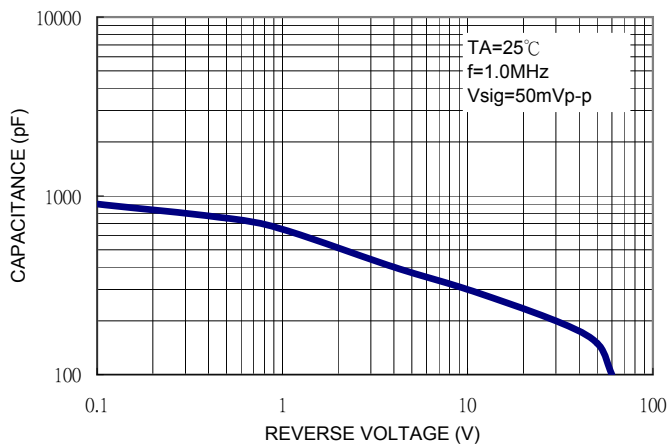


FIG. 6 TYPICAL TRANSIENT THERMAL IMPEDANCE

