



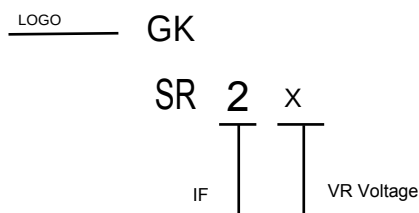
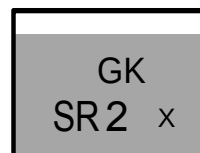
FEATURES

- * Low forward voltage drop
- * High current capability
- * High reliability
- * High surge current capability
- * Epitaxial construction

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.34 grams

VOLTAGE RANGE
20 to 100 Volts
CURRENT
2.0 Ampere



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Parameter	Symbols	SR220	SB230	SR240	SR250	SR260	SR280	SR2100	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current 0.375" (9.5 mm) Lead Length	I _{F(AV)}	2							A
Peak Forward Surge Current, 8.3 ms Single half-Sine-Wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	50							A
Maximum Forward Voltage at 2 A	V _F	0.55			0.7		0.85		V
Maximum Reverse Current at Rated DC Blocking Voltage at T _A = 25 °C at T _A = 100 °C	I _R	0.1 5					0.02 2		mA
Typical Junction Capacitance ¹⁾	C _J	180							pF
Typical Thermal Resistance ²⁾	R _{θJA}	45							°C/W
Operating Junction Temperature Range	T _J	- 55 to + 150							°C
Storage Temperature Range	T _{sta}	- 55 to + 150							°C

¹⁾ Measured at 1 MHz and applied reverse voltage of 4 V DC.

²⁾ Thermal Resistance from Junction to Ambient 0.375" (9.5 mm) lead length P.C.B. mounted.

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

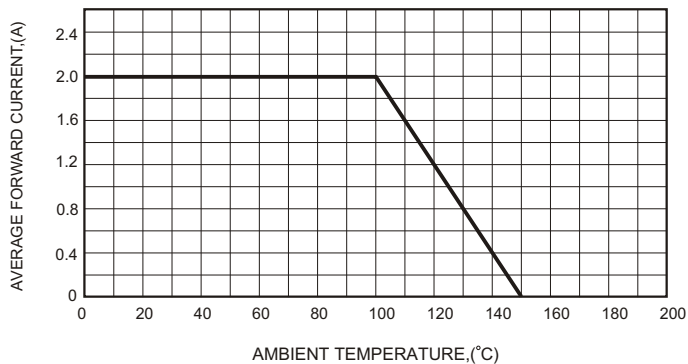


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

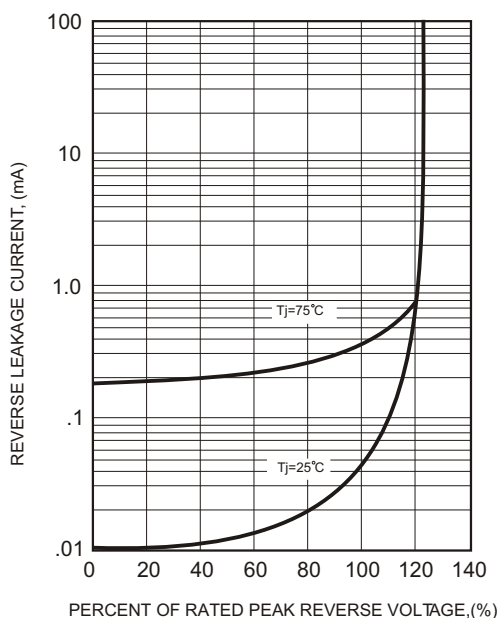


FIG.2-TYPICAL FORWARD CHARACTERISTICS

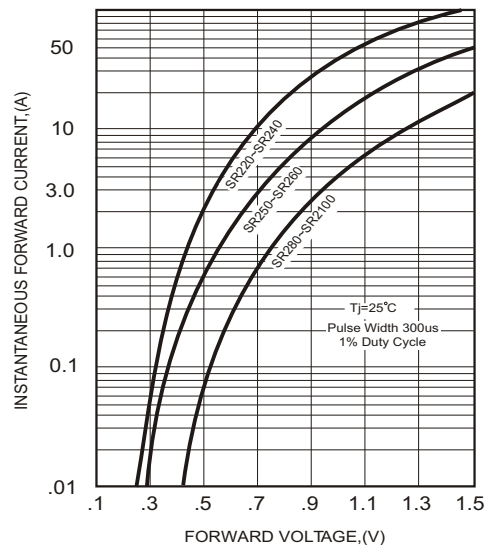


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

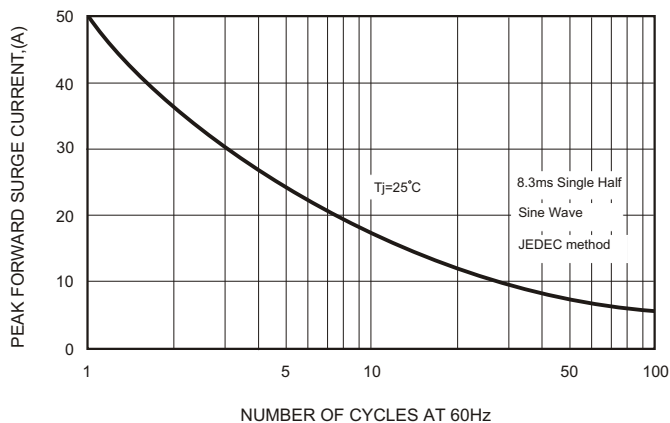
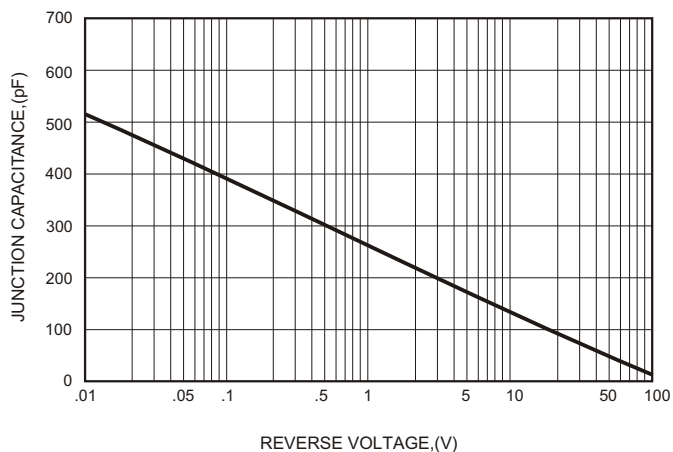
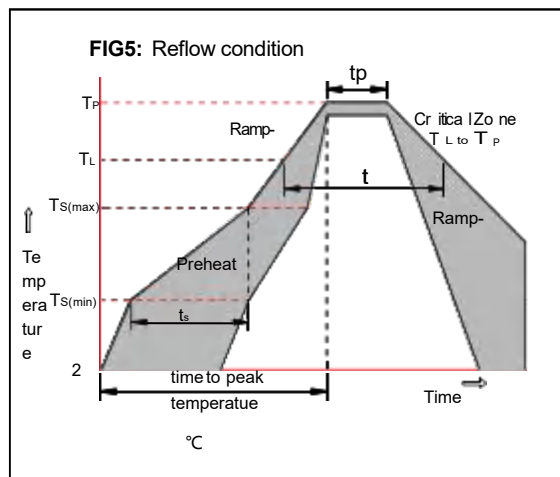


FIG.5-TYPICAL JUNCTION CAPACITANCE

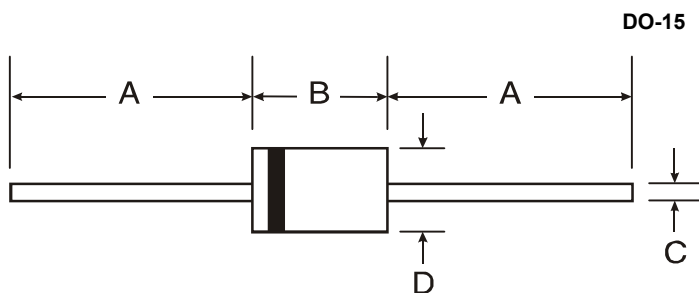


Soldering parameters

Reflow Condition		Pb-Free assembly (see as bellow)
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150°C
	-Temperature Max($T_{s(max)}$)	+200°C
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3°C/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/sec. Max
Reflow	-Temperature(T_L)(Liquid us)	+217°C
	-Temperature(t_L)	60-150 secs.
Peak Temp (T_P)		+260(+0/-5)°C
Time within 5°C of actual Peak Temp (t_P)		30 secs. Max
Ramp-down Rate		6°C/sec. Max
Time 25°C to Peak Temp (T_P)		8 min. Max
Do not exceed		+260°C



Package Dimensions & Suggested Pad Layout



DO-15		
Dim	Min	Max
A	25.40	-
B	5.80	7.60
C	0.70	0.90
D	2.60	3.60
All Dimensions in mm		