

VOLTAGE RANGE

50 to 1000 Volts

CURRENT

8.0 Ampere

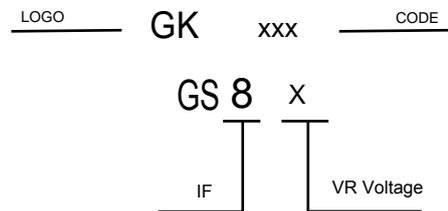
FEATURES

- * Ideal for surface mount applications
- * Easy pick and place
- * Built-in strain relief
- * High surge current capability



MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solder plated, solderable per MIL-STD-202F method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 2.24 gram



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%.

TYPE NUMBER	GS8A	GS8B	GS8D	GS8G	GS8J	GS8K	GS8M	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	8.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	175							A
Maximum Instantaneous Forward Voltage at 8.0A	1.10							V
Maximum DC Reverse Current Ta=25°C	5.0							μA
at Rated DC Blocking Voltage Ta=125°C	250							μA
Typical Junction Capacitance (Note1)	50							pF
Typical Thermal Resistance R _{JL} (Note 2)	12							°C/W
Operating and Storage Temperature Range T _J , T _{STG}	-65 — +150							°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Lead.

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

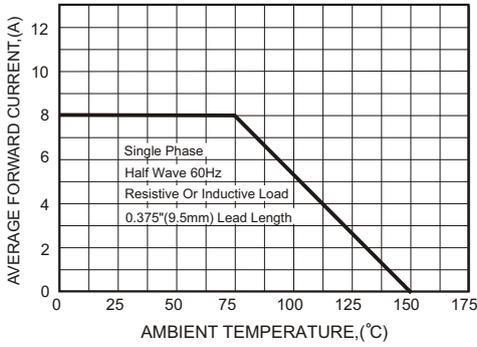


FIG.2-TYPICAL FORWARD CHARACTERISTICS

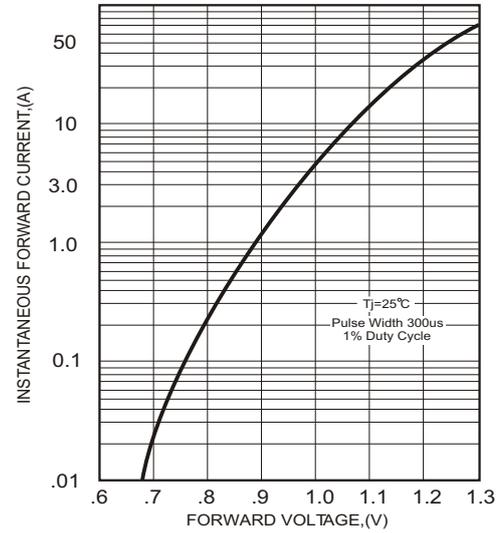


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

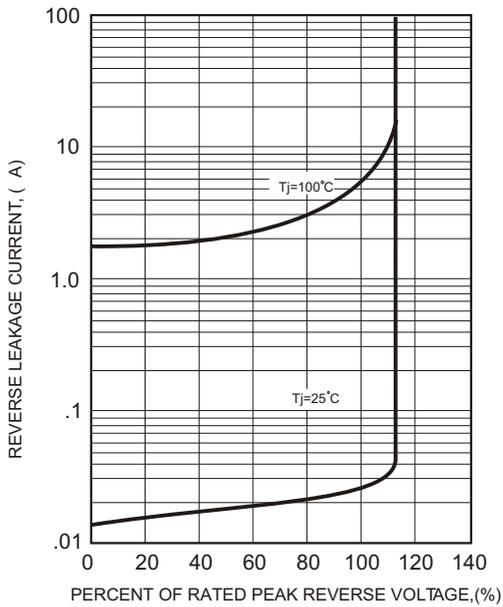


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

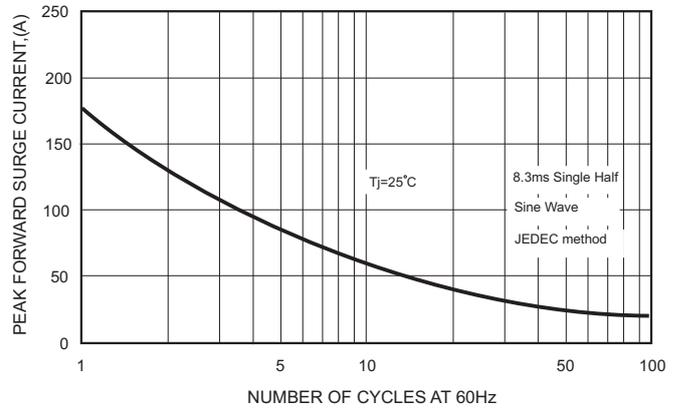
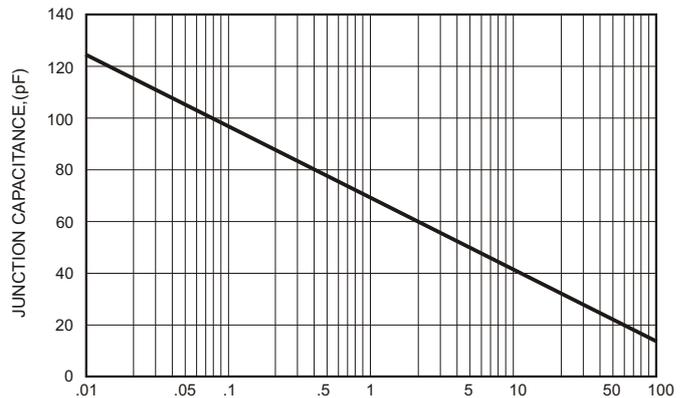


FIG.5-TYPICAL JUNCTION CAPACITANCE



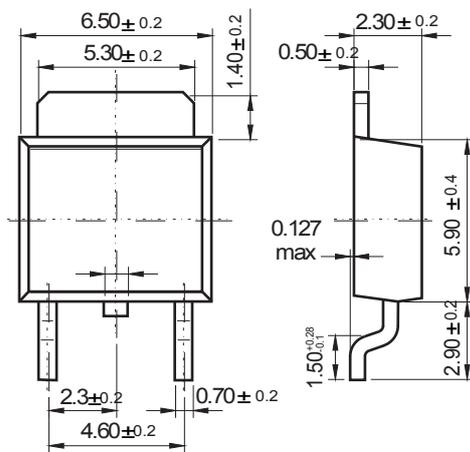
Soldering parameters

Reflow Condition		Pb-Free assembly (see as below)
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

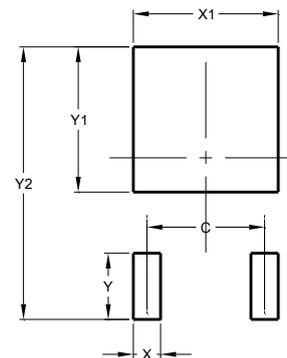


Package Dimensions & Suggested Pad Layout

TO-252



Dimensions in inches and (millimeters)



Dimensions	Value (in mm)
C	4.55
X	1.50
X1	5.80
Y	2.70
Y1	6.00
Y2	10.90

Tape & reel specification

Tape		Symbol	Dimension (mm)		
		P0	4.00±0.20		
		P1	8.00±0.20		
		P2	2.00±0.20		
		D0	1.55±0.15		
		D1	1.55±0.20		
		E	1.75±0.20		
		F	7.50±0.20		
		W	16.00±0.20		
		A0	7.10±0.20		
		B0	10.50±0.20		
		K0	2.70±0.20		
		T	0.30±0.10		
		<p>13" Reel</p>		D2	330.0±5.0
				D3	100.0±4.0
W1	20.0±5.0				
W2	25.0±5.0				
		I	13.0±2.0		
		Quantity: 2500PCS			