

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Types up to 1000 V V_{RRM}
- Ideal for printed circuit board
- High surge current capability
- High temperature soldering guaranteed: 250°C/ 10 seconds, 0.375(9.5mm) lead length
- Glass passivated chip junction
- High case dielectric strength

Mechanical Data

Case: Molded plastic body over passivated junctions
Weight: 0.071 oz, 2 g
Mounting position: Any
Terminals: Plated leads, solderable per MIL-STD-750
Method 2026 guaranteed

GBL Package



Maximum ratings, at $T_J = 25\text{ }^\circ\text{C}$, unless otherwise specified

Parameter	Symbol	Conditions	G2SBA005	G2SBA01	G2SBA02	G2SBA04	Unit
Repetitive peak reverse voltage	V_{RRM}		50	100	200	400	V
RMS reverse voltage	V_{RRMS}		35	70	140	280	V
DC blocking voltage	V_{DC}		50	100	200	400	V
Continuous forward current	I_F	$T_C \leq 25\text{ }^\circ\text{C}$	1.5	1.5	1.5	1.5	A
Surge non-repetitive forward current, Half Sine Wave	I_{FSM}	$T_C = 25\text{ }^\circ\text{C}$, $t_p = 8.3\text{ ms}$	60	60	60	60	A
Operating temperature	T_J		-55 to 150	-55 to 150	-55 to 150	-55 to 150	$^\circ\text{C}$
Storage temperature	T_{stg}		-55 to 150	-55 to 150	-55 to 150	-55 to 150	$^\circ\text{C}$

Electrical characteristics, at $T_J = 25\text{ }^\circ\text{C}$, unless otherwise specified

Parameter	Symbol	Conditions	G2SBA005	G2SBA01	G2SBA02	G2SBA04	Unit
Diode forward voltage	V_F	$I_F = 0.75\text{ A}$, $T_J = 25\text{ }^\circ\text{C}$	1.05	1.05	1.05	1.05	V
Reverse current	I_R	$V_R = 50\text{ V}$, $T_J = 25\text{ }^\circ\text{C}$	5	5	5	5	μA
		$V_R = 50\text{ V}$, $T_J = 125\text{ }^\circ\text{C}$	500	500	500	500	

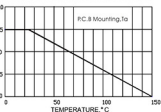
Thermal characteristics

Parameter	Symbol	Conditions	G2SBA005	G2SBA01	G2SBA02	G2SBA04	Unit
Thermal resistance, junction - case	$R_{\theta(j-c)}$		40.0	40.0	40.0	40.0	$^\circ\text{C/W}$
	$R_{\theta(c-l)}$		12.0	12.0	12.0	12.0	



AVERAGE FORWARD OUTPUT CURRENT,
AMPERES

FIG. 1-DERIVATIVE CURVE FOR OUTPUT RECTIFIER CURRENT



PEAK FORWARD SURGE CURRENT,
AMPERES

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

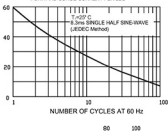


FIG. 3-TYPICAL FORWARD CHARACTERISTICS PER LEG

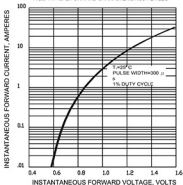


FIG. 4-TYPICAL REVERSE CHARACTERISTICS PER LEG

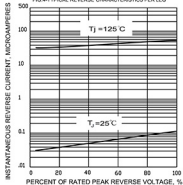


FIG. 5-TYPICAL JUNCTION CAPACITANCE PER LEG

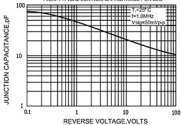


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

