

## **Mechanical Data**

Terminal: Plated leads solderable per MIL-STD 202E, Method 208C Case: UL-94 Class V-0 recognized Flame Retardant Epoxy Polarity: Polarity symbol marked on body Mounting position: any

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	Symbol	G4SB60	G4SB80	unit
Maximum repetitive peak reverse voltage	Vrrm	600	800	V
Maximum RMS voltage	Vrms	420	560	V
Maximum DC blocking voltage	Vdc	600	800	V
Maximum average forward Rectified output current at Tc = 108 $^\circ\!\!\!C$ with heatsink	lf(av)	4.0		A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	lfsm	160		A
Maximum instantaneous forward voltage drop per leg at 2.0A	Vf	0.95		V
Rating for fusing (t < 10ms)	l²t	80	110	A <sup>2</sup> Se
Maximum DC reverse current at rated DC blocking voltage per legTa = $25$ °C Ta = $125$ °C	lr	10.0 250		μΑ
Maximum thermal resistance per leg (Note1) (Note2)	Rth(ja) Rth(jc)	30.0 5.5		°CA
Operating junction and storage temperature range	Tj, Tstg	-55 to +150		°C

1. junction to ambient, without heatsink

2. junction to case, with heatsink

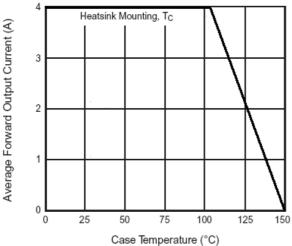


Figure 1. Derating Curve Output Rectified Current

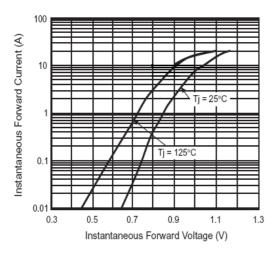


Figure 3. Typical Instantaneous Forward Characteristics Per Leg

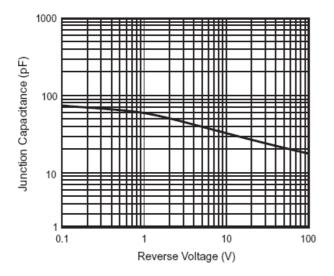
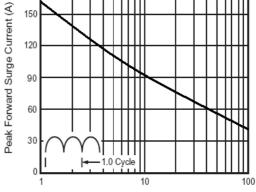


Figure 5. Typical Junction Capacitance Per Leg

180 150 120

**RATINGS AND CHARACTERISTIC CURVES G4SB60 THRU G4SB80** 



Number of Cycles at 60 Hz

Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

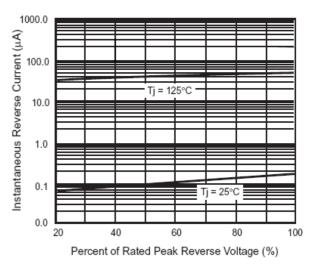


Figure 4. Typical Reverse Characteristics Per Leg