

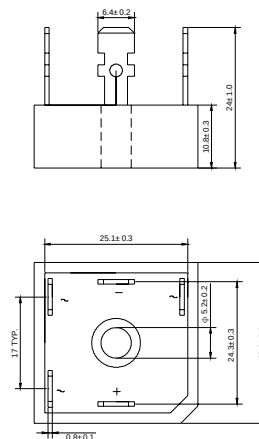
THREE - PHASE SILICON BRIDGES

VOLTAGE RANGE: 50 --- 1600 V
CURRENT: 35.0 A

FEATURES

- ◇ Rating to 1600 V PRV
- ◇ Surge overload rating to 500 Amperes peak
- ◇ Ideal for printed circuit board
- ◇ Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- ◇ Lead solderable per MIL-STD-202 method 208
- ◇ High case dielectric strength of 2200 V_{RMS}

SGBPC35

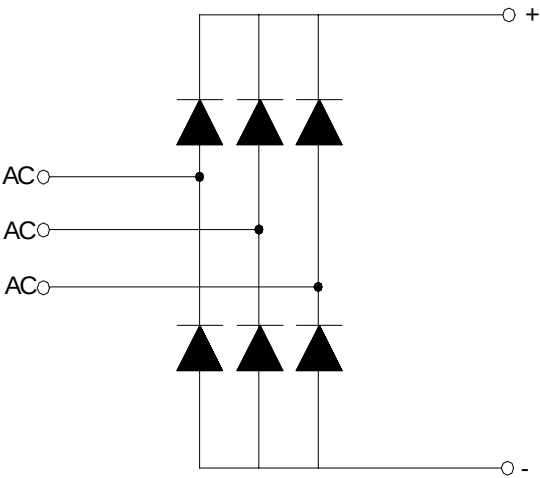


Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

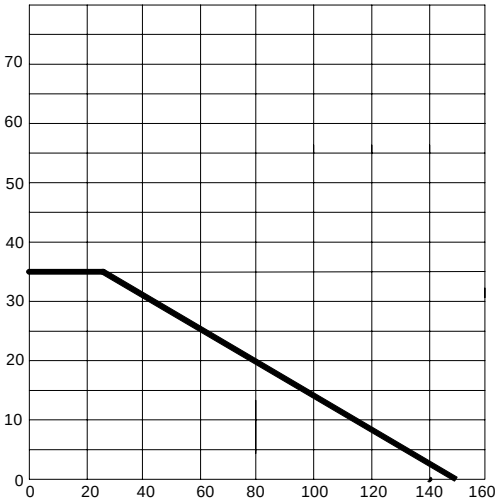
Ratings at 25°C ambient temperature unless otherwise specified.

		SGBPC 35005	SGBPC 3501	SGBPC 3502	SGBPC 3504	SGBPC 3506	SGBPC 3508	SGBPC 3510	SGBPC 3512	SGBPC 3514	SGBPC 3516	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	1200	1400	1600	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	840	980	1120	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	1200	1400	1600	V
Maximum average forward Output current @ $T_A=25^\circ\text{C}$	$I_{F(AV)}$	35.0										A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	500.0										A
Maximum instantaneous forward voltage @ 12.0 A	V_F	1.19										V
Maximum reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=100^\circ\text{C}$	I_R	10.0 5.0										μA mA
Thermal resistance junction to case at DC Operation per bridge	R_{JC}	1.16										K/W
Thermal resistance case to heatsink mounting surface, smooth, flat and grease	R_{CS}	0.2										K/W
Operating junction temperature range	T_J	- 40 ---- + 150										$^\circ\text{C}$
Storage temperature range	T_{STG}	- 40 ---- + 150										$^\circ\text{C}$



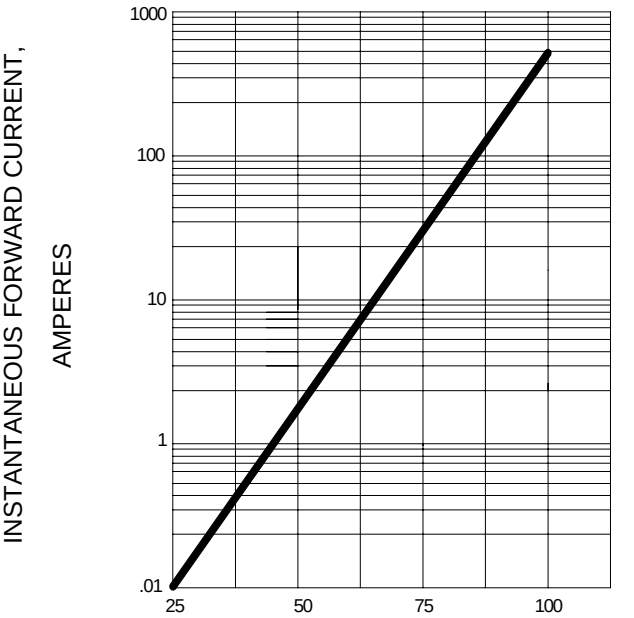
AVERAGE FORWARD OUTPUT CURRENT,
AMPERES

FIG.1 -- FORWARD DERATING CURVE



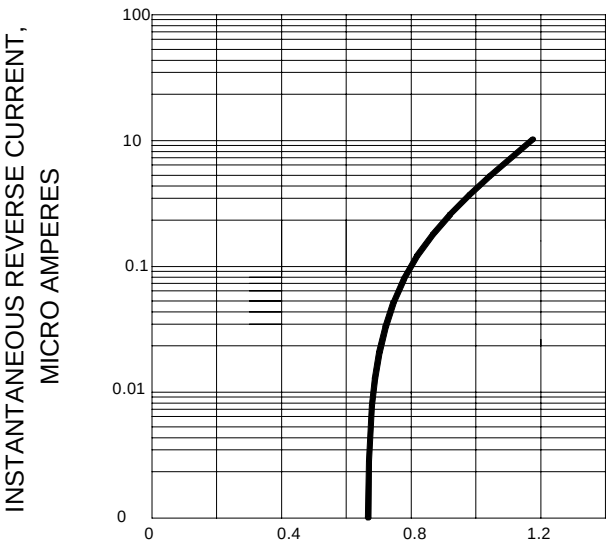
AMBIENT TEMPERATURE, °C

FIG.2 -- TYPICAL FORWARD CHARACTERISTIC



INSTANTANEOUS FORWARD VOLTAGE, VOLTS

FIG.3-- TYPICAL REVERSE CHARACTERISTIC



TEMPERATURE AT V_{rm}