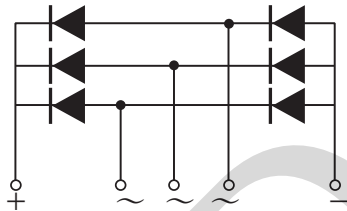
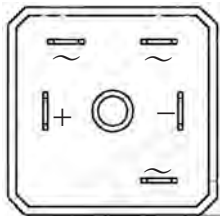


Three-phase Bridge Rectifiers



Features

- Compliant with RoHS Provisions
- Forward Current - 75A
- Reverse Voltage - 1600 V
- High forward surge current capability
- High heat-conducting performance
- Thermal welding performance:
260 °C / 10sec

Applications

- Case: SGBPC
- Switching Power Supply
- Home Appliances, Office Devices
- Industrial Auto-equipments

Maximum Ratings and Electrical characteristics

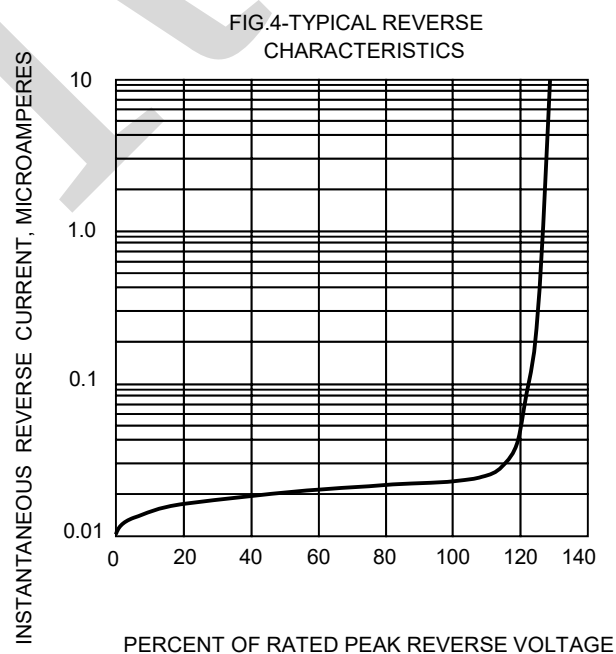
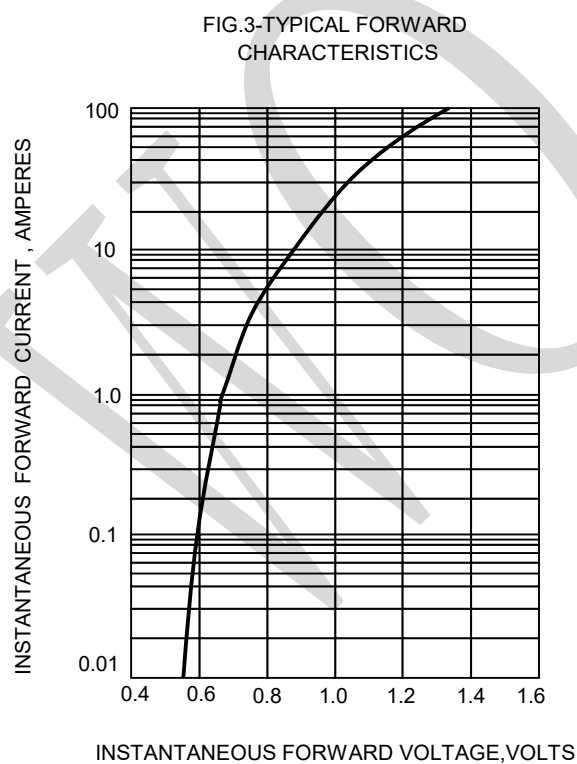
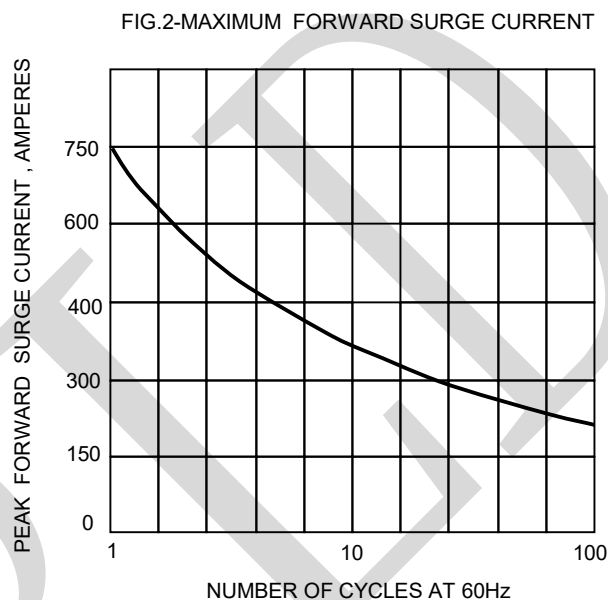
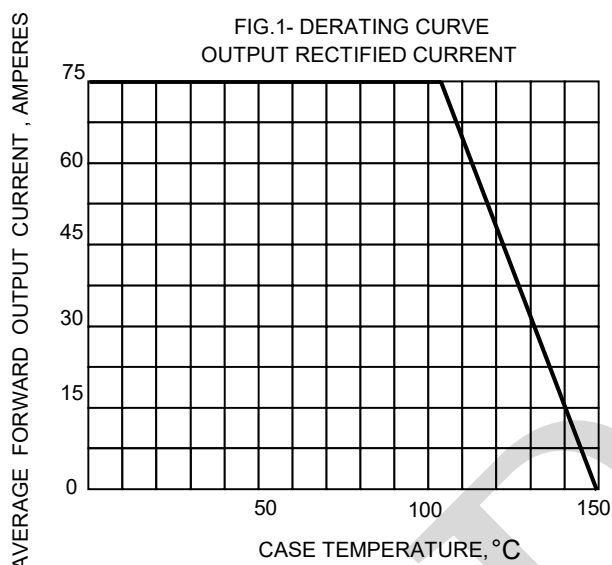
Ratings at 25 °C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbol	SGBPC7516	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	1600	V
Maximum RMS voltage	V_{RMS}	1120	V
Maximum DC Blocking Voltage	V_{DC}	1600	V
Average Rectified Output Current	I_O	75.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load(JEDEC Method)	I_{FSM}	750	A
$I^2 t$ rating for fusing (1ms < t < 8.3ms)	$I^2 t$	2334	A ² S
Maximum Forward Voltage at 37.5A and 25°C	V_F	1.2	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5 500	μA
Junction to ambient, without heatsink Junction to case, with heatsink	$R_{\theta JC}$	0.75	°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

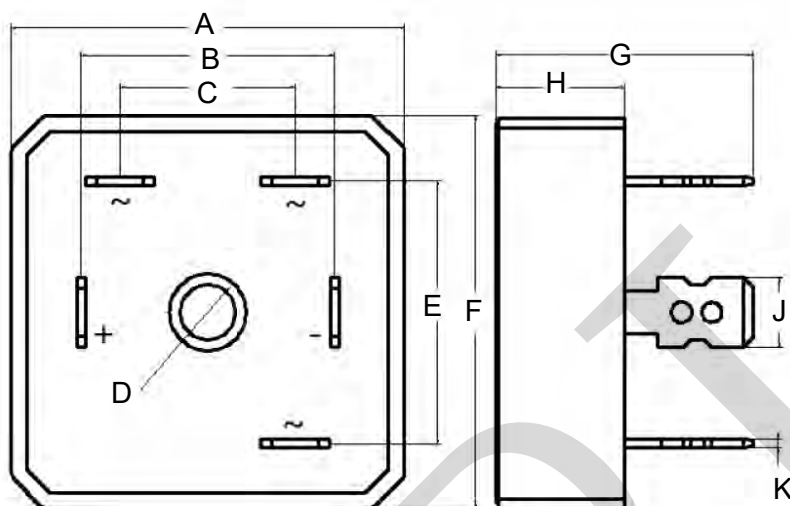
2. Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81×3.81 cm) copper pad.

RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



PACKAGE OUTLINE DIMENSIONS

Note: unit mm(mil)



SGBPC mechanical data

UNIT		A	B	C	D	E	F	H	G	J	K
mm	max	35.5	23.8	15.5	4.5	23.5	35.5	11.2	20.5	6.1	0.6
	min	36.5	25.8	17.0	5.5	24.5	36.5	12.2	22.5	6.5	1.0
mil	max	1397.6	937.0	669.3	177.1	925.2	1397.6	440.9	807.1	240.1	23.6
	min	1437.1	1015.7	649.6	216.5	964.6	1437.1	480.3	885.8	255.9	39.4