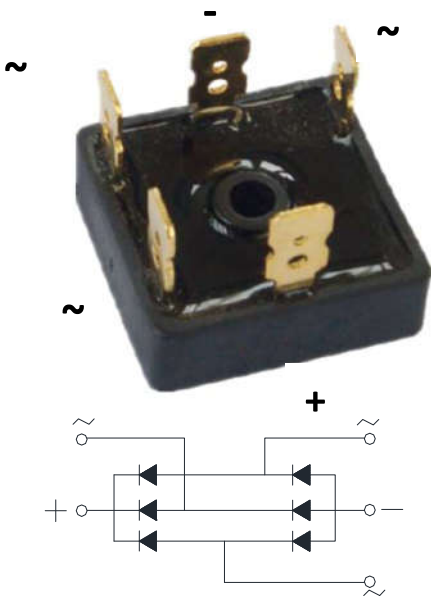


Three Phase Bridge Rectifiers



Features

- Glass passivated chip
- High surge current capability
- Low thermal resistance
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications

General purpose use in AC/DC bridge full wave rectification for power supply, home appliances, office equipment, industrial automation applications.

Mechanical Data

- **Package:** SGBPC
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102

■ Maximum Ratings (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SGBPC2504	SGBPC2506	SGBPC2508	SGBPC2510	SGBPC2512	SGBPC2514	SGBPC2516
Device marking code			SGBPC2504	SGBPC2506	SGBPC2508	SGBPC2510	SGBPC2512	SGBPC2514	SGBPC2516
Repetitive Peak Reverse Voltage	VRRM	V	400	600	800	1000	1200	1400	1600
Average Rectified Output Current @60Hz sine wave, R-load, With heatsink, T _c =55°C	I _O	A	25						
Surge(Non-repetitive)Forward Current @60Hz Half- sine Wave, 1 cycle, T _a =25°C	I _{FSM}	A	400						
Current Squared Time @1ms≤t≤8.3ms T _j =25°C, Rating of per diode	I ² t	A ² S	660						
Storage Temperature	T _{stg}	°C	-55~+150						
Junction Temperature	T _j	°C	-55 ~+150						
Dielectric Strength, Terminals to case, AC 1 minute	V _{dis}	KV	2.5						
Mounting Torque	TOR	kg·cm	10						

■ Electrical Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SGBPC2504	SGBPC2506	SGBPC2508	SGBPC2510	SGBPC2512	SGBPC2514	SGBPC2516
Maximum instantaneous forward voltage drop per diode	V _{FM}	V	I _{FM} =12.5A	1.2					
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM}	µA	V _{RM} =VRRM	10					

■ Thermal Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SGBPC2504	SGBPC2506	SGBPC2508	SGBPC2510	SGBPC2512	SGBPC2514	SGBPC2516
Thermal Resistance Between junction and case, With heatsink	R _{θ J-C}	°C/W	1.7						

Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SGBPC2504~SGBPC2516	A1	Approximate 17.5	50	50	500	Paper Box

Characteristics (Typical)

FIG1:Io-Tc Curve

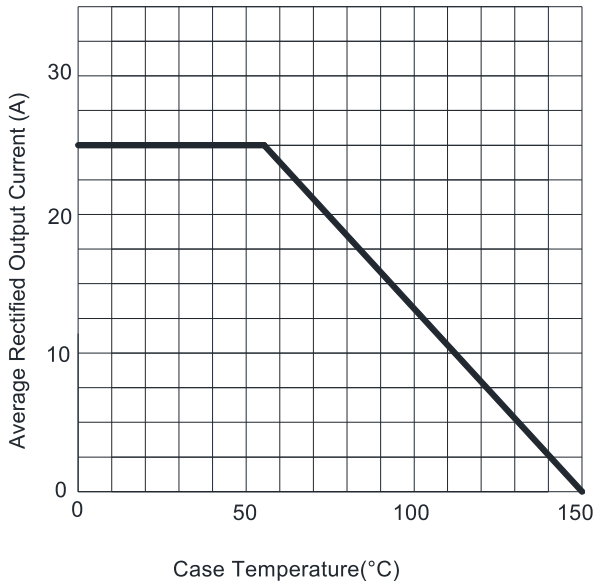


FIG2: Surge Forward Current Capability

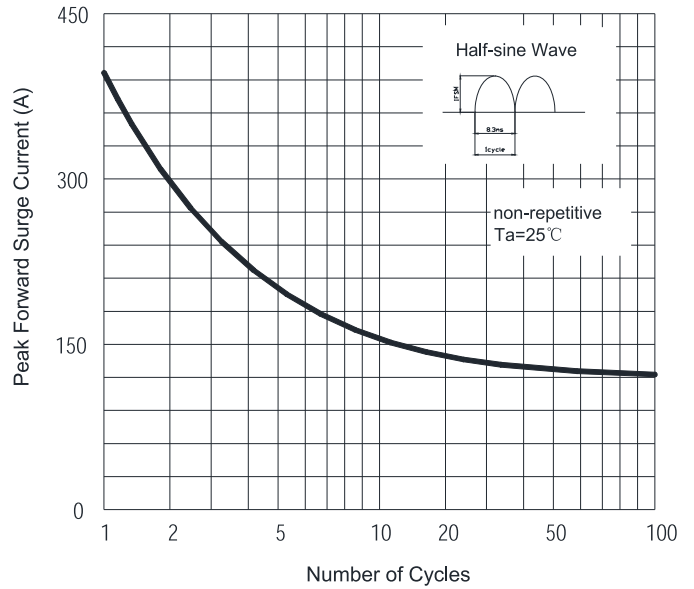


FIG3: Instantaneous Forward Voltage

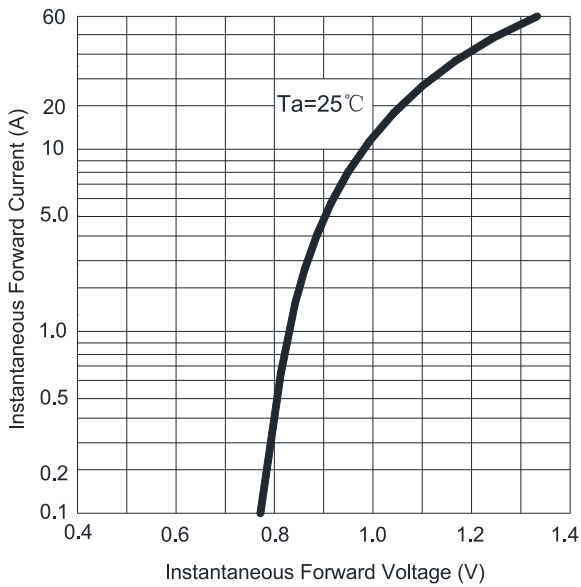
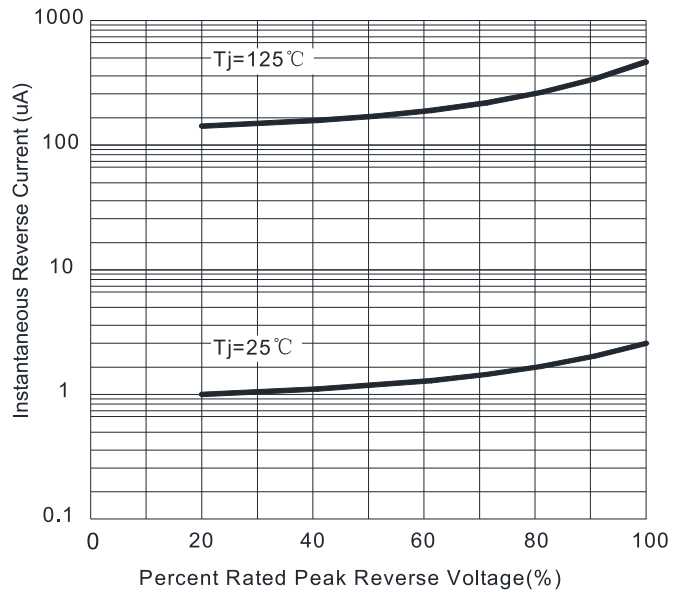
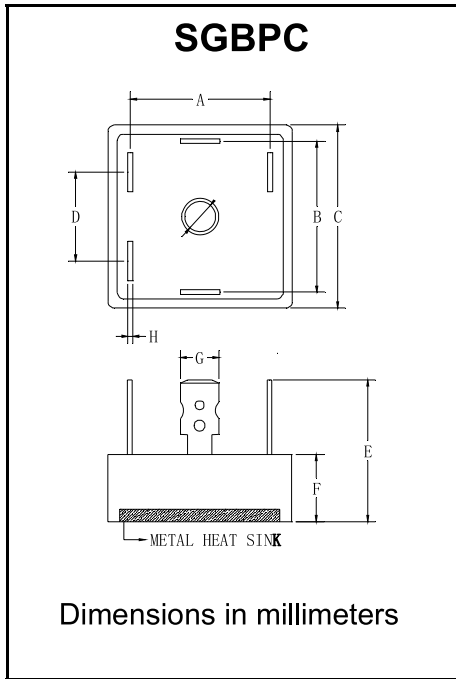


FIG4: Typical Reverse Characteristics



■ Outline Dimensions



SGBPC		
Dim	Min	Max
A	23.3	24.3
B	23.3	24.3
C	28.2	28.8
D	15.5	16.5
E	/	25
F	9	10
G	6.2	6.4
H	0.75	0.85



SGBPC2504 THRU SGBPC2516

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