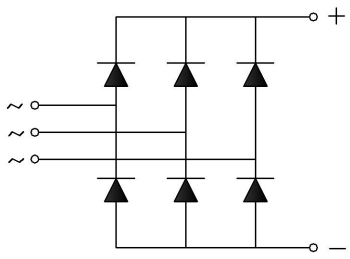
SBR2504 THRU SBR2516

RoHS COMPLIANT

Reverse Voltage - 1000 to 1600Volts
Forward Current - 75 Amperes



Features

- 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**: SKBPC
  Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals**: Tin plated leads, solderable per J-STD-002 and JESD22-B10

■Maximum Ratings (Ta=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SBR2504	SBR2506	SBR2508	SBR2510	SBR2512	SBR2514	SBR2516
Device marking code			SBR2504	SBR2506	SBR2508	SBR2510	SBR2512	SBR2514	SBR2516
Repetitive Peak Reverse Voltage	V_{RRM}	V	400	600	800	1000	1200	1400	1600
Average Rectified Output Current @60Hz sine wave, R-load, With heatsink Tc=55℃	I_O	A	25						
Surge(Non-repetitive)Forward Current @60HZ Half- sine Wave, 1 cycle, T_a=25℃	I_{FSM}	A	360						
Current Squared Time @1ms≤t<8.3ms Tj=25℃, Rating of per diode	I^2t	A^2S	540						
Storage Temperature	T_{stg}	℃	-55~+150						
Junction Temperature	T_j	℃	-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℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SBR2504 THRU SBR2516
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}=V_{RRM}	10

■Thermal Characteristics（T_a=25℃ Unless otherwise specified）

PARAMETER		SYMBOL	UNIT	SBR2504 THRU SBR2516
Thermal Resistance	Between junction and case, With heatsink	$R_{\theta J-C}$	℃/W	1.9

RATINGS AND CHARACTERISTIC CURVES

FIG1:Io-Tc Curve

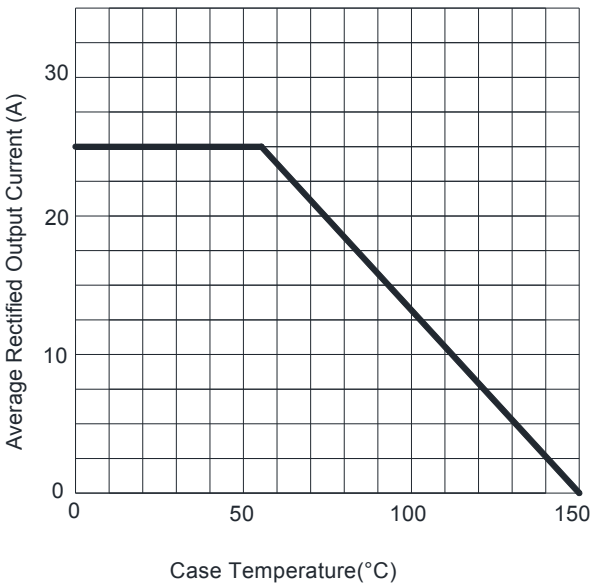


FIG2:Surge Forward Current Capability

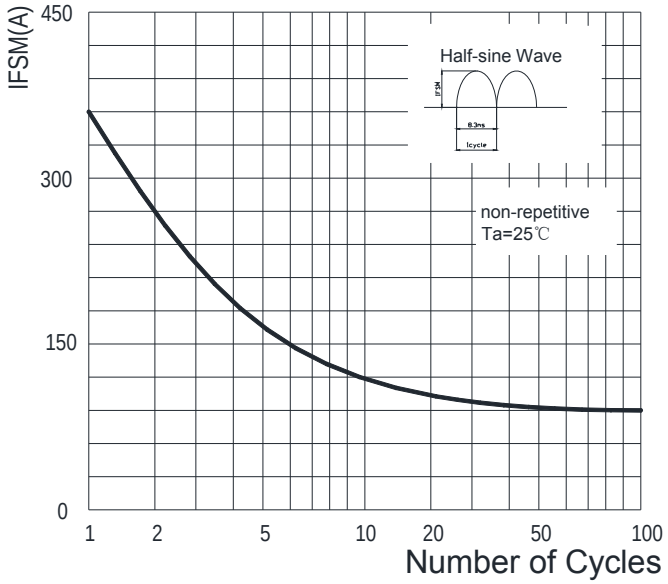


FIG3:Instantaneous Forward Voltage

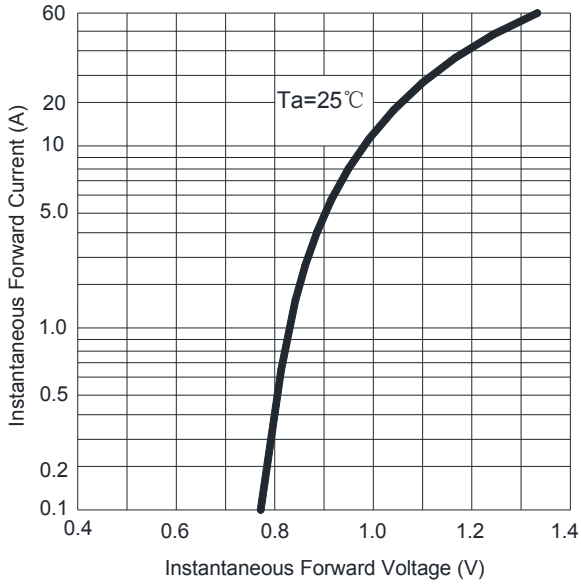
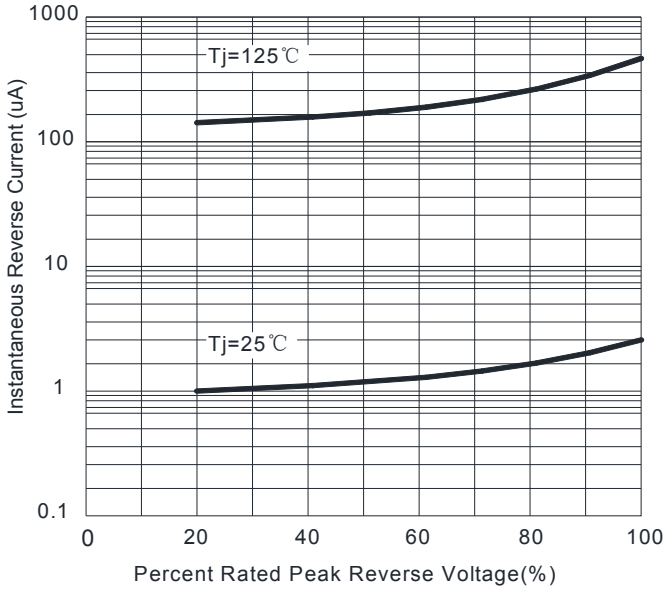
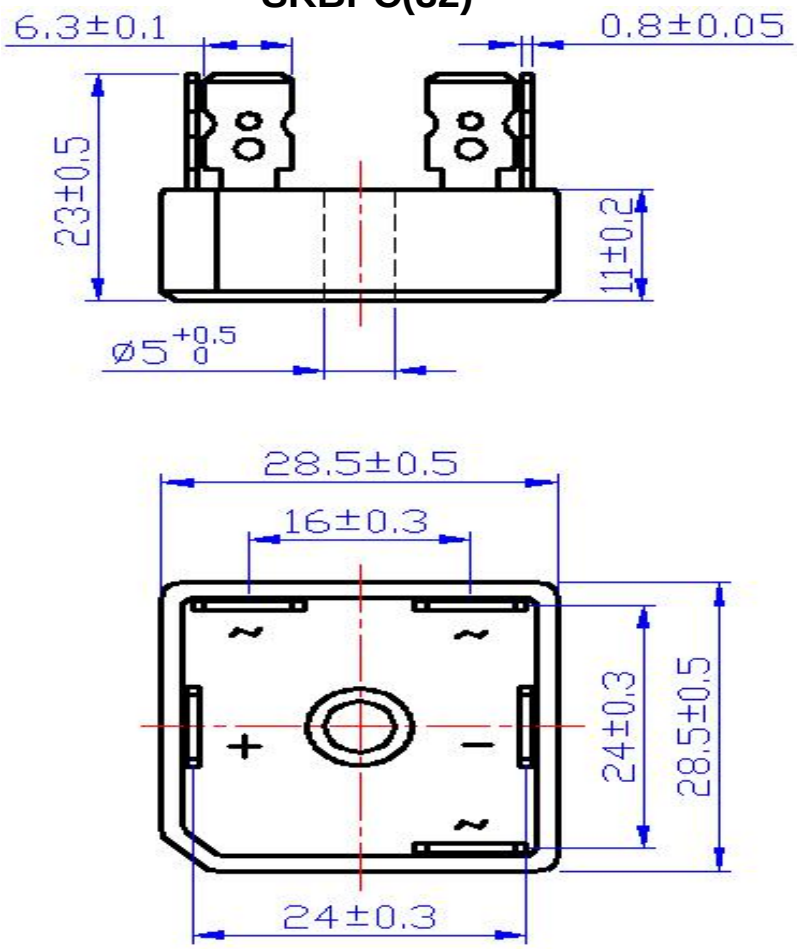


FIG4:Typical Reverse Characteristics



PACKAGE OUTLINE DIMENSIONS

SKBPC(32)



Dimensions in millimeters