# SKBPC5004 - SKBPC5016

**Voltage Range - 400 to 16 00 V**

**Forward Current - 50 Ampere**

## THREE-PHASE BRIDGE RECTIFIER

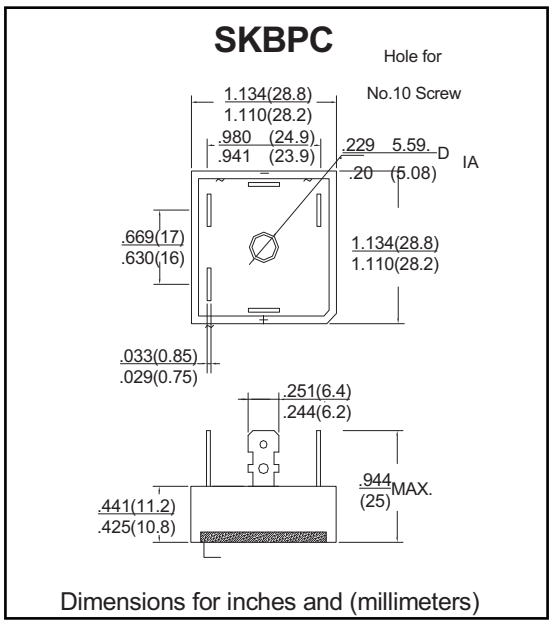
### FEATURES

- $I_o$ 50A
- $V_{RRM}$ 400V~1600V
- Glass passivated chip
- High surge forward current capability

### APPLICATIONS

- General purpose 3 phase Bridge rectifier applications

**Outline Dimensions and Mark**




Dimensions for inches and (millimeters)

### LIMITING VALUES（ABSOLUTE MAXIMUM RATING）

| Item | Symbol | Unit | Conditions | SKPBC50 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 04 | 06 | 08 | 10 | 12 | 14 | 16 |
| Repetitive Peak Reverse Voltage | $V_{RRM}$ | V | | 400 | 600 | 800 | 1000 | 1200 | 1400 | 1600 |
| Average Rectified Output Current | $I_O$ | A | 60Hz sine wave, R-load, with heatsink Ta=55℃ | 50 | | | | | | |
| Surge(Non-repetitive)Forward Current | $I_{FSM}$ | A | 60Hz sine wave, 1 cycle, $T_j$=25℃ | 500 | | | | | | |
| Current Squared Time | $I^2t$ | $A^2S$ | 1ms≤t<8.3ms Tj=25℃， Rating of per diode | 1040 | | | | | | |
| Storage Temperature | $T_{stg}$ | ℃ | | -40 ~+150 | | | | | | |
| Junction Temperature | $T_j$ | ℃ | | -40~+150 | | | | | | |
| Dielectric Strength | $V_{dis}$ | KV | Terminals to case,AC 1 minute | 2.5 | | | | | | |

### Electrical Characteristics（$T_a$=25℃ Unless otherwise specified）

| Item | Symbol | Unit | Test Condition | Max |
|---|---|---|---|---|
| Peak Forward Voltage | $V_{FM}$ | V | $I_{FM}$=17A, Pulse measurement, Rating of per diode | 1.2 |
| Peak Reverse Current | $I_{RRM}$ | μA | $V_{RM}$=$V_{RRM}$ , Pulse measurement, Rating of per diode | 10 |
| Thermal Resistance | $R_{\theta J-C}$ | ℃/W | Between junction and case with heatsink | 0.9 |



Email: sales@micindia.com Website: www.micindia.com

# SKBPC5004 - SKBPC5016

**Voltage Range - 400 to 16 00 V**
**Forward Current - 50 Ampere**

## THREE-PHASE BRIDGE RECTIFIER

### CHARACTERISTICS(TYPICAL)

FIG1:Io-Tc Curve

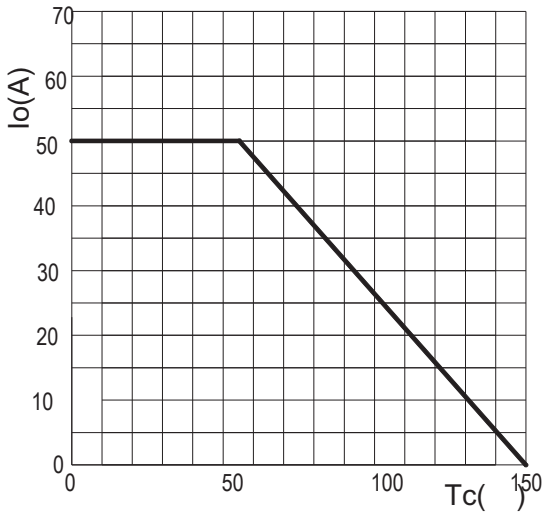



FIG2:Surge Forward Current Capadility

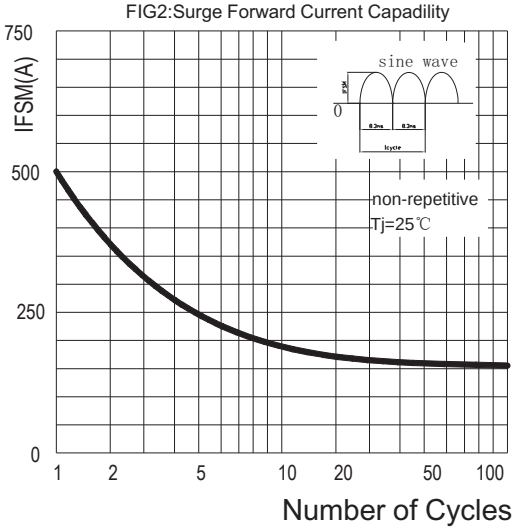



FIG3:Instantaneous Forward Voltage

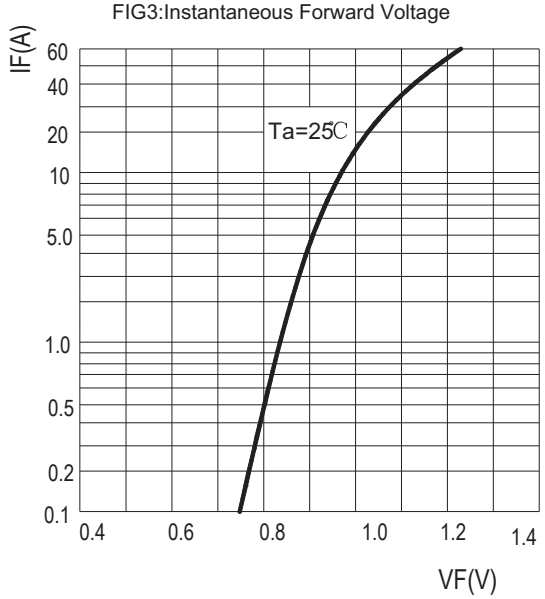
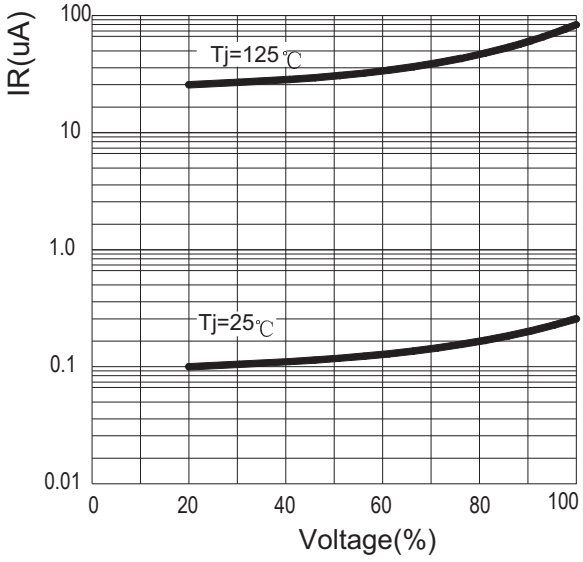



FIG4:Typical Reverse Characteristics




**Disclaimer**

All product, product specifications and data are subject to change without notice to improve reliability, function or design or otherwise.


Email: sales@micindia.com Website: www.micindia.com