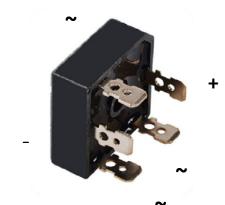
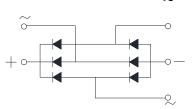


# **Three Phase Bridge Rectifiers**





#### **Features**

- UL recognition, file #E230084
- 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: 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°C Unless otherwise specified)

| = Waximum Ratings (1a-20 Comess otherwise speciment)                              |                  |                  |           |           |           |           |           |           |           |
|---|------------------|------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| PARAMETER   | SYMBO            | UNIT             | SKBPC3504 | SKBPC3506 | SKBPC3508 | SKBPC3510 | SKBPC3512 | SKBPC3514 | SKBPC3516 |
| Device marking code   |                  |                  | SKBPC3504 | SKBPC3506 | SKBPC3508 | SKBPC3510 | SKBPC3512 | SKBPC3514 | SKBPC3516 |
| Repetitive Peak Reverse Voltage   | VRRM             | ٧                | 400       | 600       | 800       | 1000      | 1200      | 1400      | 1600      |
| Average Rectified Output Current @60Hz sine wave, R-load, With heatsink Tc=55°C   | Ю                | А                | 35        |           |           |           |           |           |           |
| Surge(Non-repetitive)Forward<br>Current @60HZ Half- sine Wave, 1<br>cycle, Ta=25℃ | IFSM             | Α                | 425       |           |           |           |           |           |           |
| Current Squared Time<br>@1ms≤t<8.3ms Tj=25°C, Rating of<br>per diode              | l²t              | A <sup>2</sup> S | 750       |           |           |           |           |           |           |
| Storage Temperature   | T <sub>stg</sub> | °C               | -55 ~+150 |           |           |           |           |           |           |
| Junction Temperature  | Tj               | °C               | -55 ~+150 |           |           |           |           |           |           |
| Dielectric Strength, Terminals to case, AC 1 minute                               | Vdis             | KV               | 2.5       |           |           |           |           |           |           |
| Mounting Torque   | TOR              | kg⋅cm            | 10        |           |           |           |           |           |           |

#### **■Electrical Characteristics** (T<sub>a</sub>=25°C Unless otherwise specified)

|   | -      | •    |                    |                     |
|---|--------|------|--------------------|---------------------|
| PARAMETER   | SYMBOL | UNIT | TEST<br>CONDITIONS | SKBPC3504~SKBPC3516 |
| Maximum instantaneous forward voltage drop per diode              | VFM    | ٧    | IFM=17.5A          | 1.2                 |
| Maximum DC reverse current at rated DC blocking voltage per diode | IRRM   | μΑ   | VRM=VRRM           | 10                  |

## ■Thermal Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

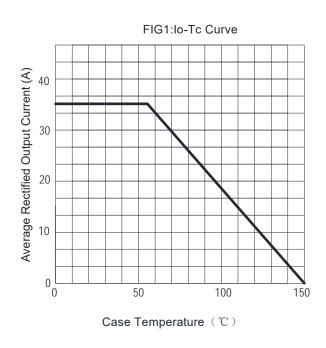
| PA                    | RAMETER                                  | SYMBOL             | UNIT | SKBPC3504~SKBPC3516 |
|-----------------------|--|--------------------|------|---------------------|
| Thermal<br>Resistance | Between junction and case, With heatsink | R <sub>0</sub> J-C | °C/W | 1.35                |

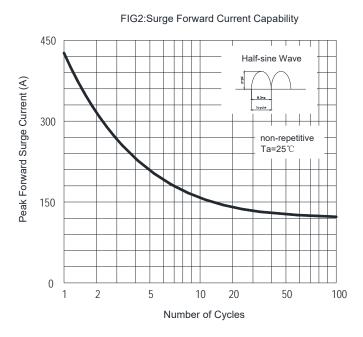


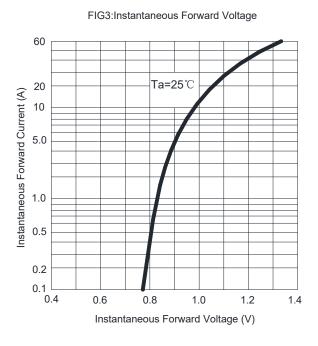
**■Ordering Information** (Example)

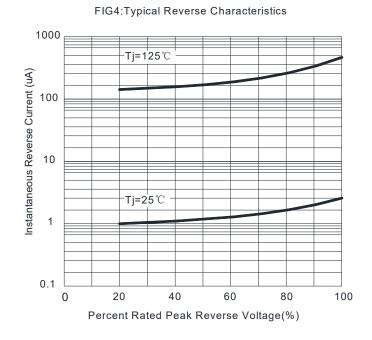
| PREFERED<br>P/N     | PACKAGE<br>CODE | UNIT WEIGHT(g) | MINIMUM<br>PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|---------------------|-----------------|----------------|-------------------------|-------------------------|----------------------------|---------------|
| SKBPC3504~SKBPC3516 | A1              | Approximate 19 | 50                      | 50                      | 500                        | Paper Box     |

# ■ Characteristics (Typical)

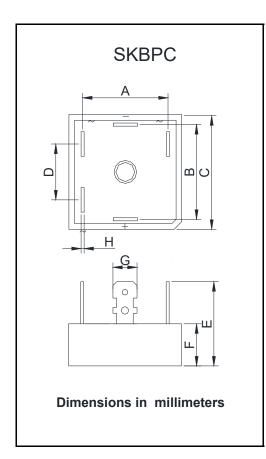








## **■** Outline Dimensions



| SKBPC |      |      |  |  |  |
|-------|------|------|--|--|--|
| Dim   | Min  | Max  |  |  |  |
| Α     | 23.1 | 24.1 |  |  |  |
| В     | 23.1 | 24.1 |  |  |  |
| С     | 28.2 | 28.8 |  |  |  |
| D     | 16   | 17   |  |  |  |
| Е     | /    | 25   |  |  |  |
| F     | 10.8 | 11.2 |  |  |  |
| G     | 6.2  | 6.4  |  |  |  |
| Н     | 0.75 | 0.85 |  |  |  |



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