

Schottky Rectifier

■ Features

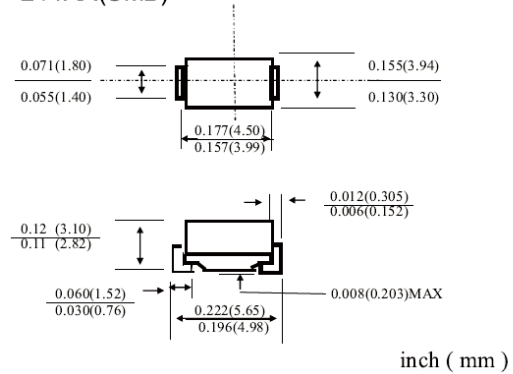
- I_o 3.0A
- V_{RRM} 20V-100V
- High surge current capability
- Cases: Molded plastic

■ Applications

- Rectifier

■ Outline Dimensions and Mark

DO - 214AA(SMB)



■ Limiting Values (Absolute Maximum Rating)

| Item | Symbol | Unit | Test Conditions | SK3 | | | | | | | |
|--------------------------------------|-------------|-------------|---|------------|----|----|----|----------|----|-----|--|
| | | | | 2B | 3B | 4B | 5B | 6B | 9B | 10B | |
| Repetitive Peak Reverse Voltage | V_{RRM} | V | | 20 | 30 | 40 | 50 | 60 | 90 | 100 | |
| Average Forward Current | $I_{F(AV)}$ | A | 60HZ Half-sine wave, Resistance load, TL(Fig.1) | 3.0 | | | | | | | |
| Surge(Non-repetitive)Forward Current | I_{FSM} | A | 60Hz Half-sine wave ,1 cycle , $T_a = 25^{\circ}C$ | 100 | | | | | | | |
| Junction Temperature | T_J | $^{\circ}C$ | | -55~+125 | | | | -55~+150 | | | |
| Storage Temperature | T_{STG} | $^{\circ}C$ | | -55 ~ +150 | | | | | | | |

■ Electrical Characteristics ($T_a=25^{\circ}C$ Unless otherwise specified)

| Item | Symbol | Unit | Test Condition | SK3 | | | | | | | |
|-----------------------------|------------------|---------------|-------------------------------|--------------------|----|----|------|----|------|-----|--|
| | | | | 2B | 3B | 4B | 5B | 6B | 9B | 10B | |
| Peak Forward Voltage | V_F | V | $I_F=3.0A$ | 0.50 | | | 0.70 | | 0.85 | | |
| Peak Reverse Current | I_{RRM1} | mA | $V_{RM}=V_{RRM}$ | $T_a=25^{\circ}C$ | | | 0.5 | | | 0.1 | |
| | I_{RRM2} | | | $T_a=100^{\circ}C$ | | | 10 | | | 5.0 | |
| Thermal Resistance(Typical) | $R_{\theta J-A}$ | $^{\circ}C/W$ | Between junction and ambient | 55 ¹⁾ | | | | | | | |
| | $R_{\theta J-L}$ | | Between junction and terminal | 17 ¹⁾ | | | | | | | |

Notes:

- ¹⁾ Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.6" x 0.6" (16 mm x 16 mm) copper pad areas



Characteristics(Typical)

FIG.1: FORWARD CURRENT DERATING CURVE

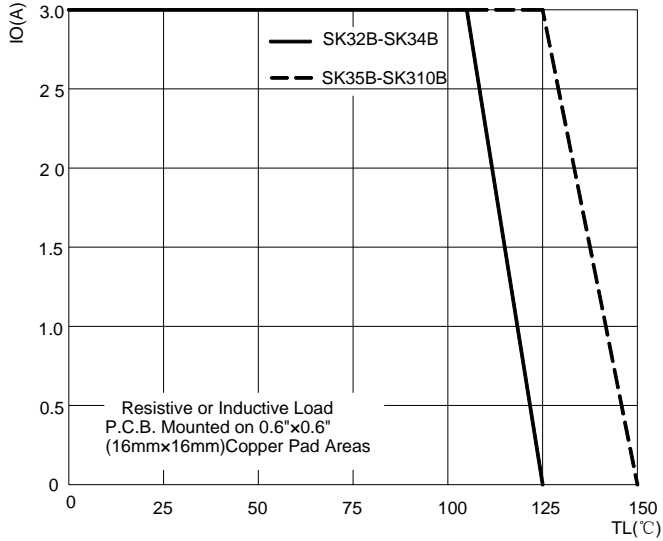


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

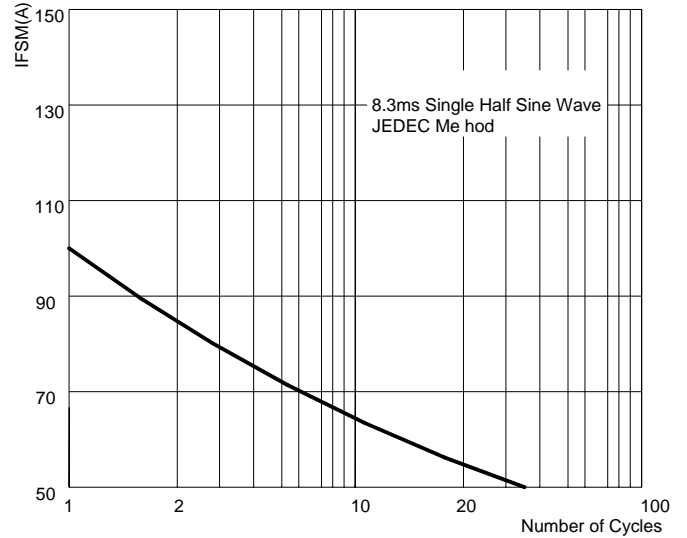


FIG.3: TYPICAL FORWARD CHARACTERISTICS

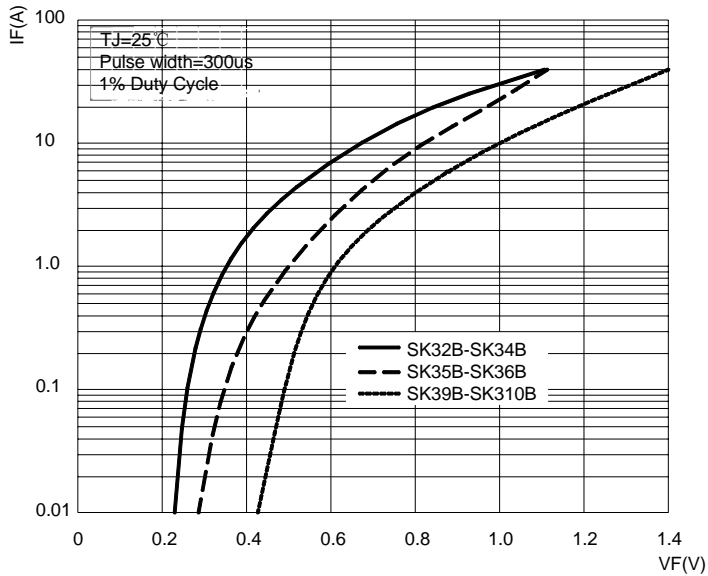


FIG.4: TYPICAL REVERSE CHARACTERISTICS

