



*DC COMPONENTS CO., LTD.*

RECTIFIER SPECIALISTS

SK12FL  
THRU  
SK120FL

**TECHNICAL SPECIFICATIONS OF SCHOTTKY BARRIER RECTIFIER**

**VOLTAGE RANGE - 20 to 200 Volts**

**CURRENT - 1.0 Ampere**

**FEATURES**

- \* Ideal for surface mounted applications
- \* Low leakage current
- \* Low profile space
- \* Low forward voltage drop
- \* High forward surge capability
- \* Glass passivated junction

**MECHANICAL DATA**

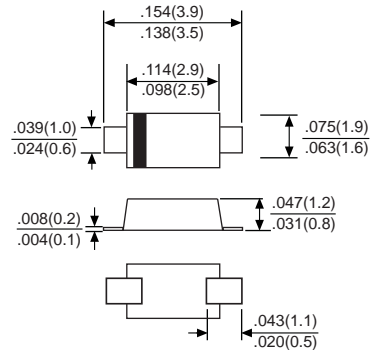
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Terminals: Solder plated solderable per MIL-STD-750, Method 2026
- \* Polarity: As marked
- \* Mounting position: Any
- \* Weight: 0.017 gram

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.



SOD-123FL



Dimensions in inches and (millimeters)

|   | SYMBOL       | SK12FL      | SK13FL | SK14FL | SK15FL | SK16FL | SK18FL | SK110FL | SK115FL | SK120FL | UNITS |
|---|--------------|-------------|--------|--------|--------|--------|--------|---------|---------|---------|-------|
| Maximum Recurrent Peak Reverse Voltage  | VRRM         | 20          | 30     | 40     | 50     | 60     | 80     | 100     | 150     | 200     | Volts |
| Maximum RMS Voltage   | VRMS         | 14          | 21     | 28     | 35     | 42     | 56     | 70      | 105     | 140     | Volts |
| Maximum DC Blocking Voltage   | VDC          | 20          | 30     | 40     | 50     | 60     | 80     | 100     | 150     | 200     | Volts |
| Maximum Average Forward Rectified Current at Derating Lead Temperature                            | IO           | 1.0         |        |        |        |        |        |         |         |         | Amps  |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method) | IFSM         | 30          |        |        |        |        |        |         |         |         | Amps  |
| Maximum Instantaneous Forward Voltage at 1.0A DC  | VF           | 0.55        |        |        | 0.70   |        | 0.85   |         | 0.95    |         | Volts |
| Maximum DC Reverse Current at Rated DC Blocking Voltage   | @ TA = 25°C  | 1.0         |        |        |        |        |        |         |         |         | mAmps |
|   | @ TA = 100°C | 10          |        |        |        |        |        |         |         |         |       |
| Typical Thermal Resistance (Note 1)   | RθJL         | 20          |        |        |        |        |        |         |         |         | °C/W  |
| Storage Operating Temperature Range   | TJ, TSTG     | -55 to +150 |        |        |        |        |        |         |         |         | °C    |

NOTES :1. Mounted on FR-4 P.C.B. with 0.9X1.5 mm copper pads areas.

# RATING AND CHARACTERISTIC CURVES (SK12FL THRU SK120FL)

FIG. 1  
TYPICAL FORWARD CURRENT  
DERATING CURVE

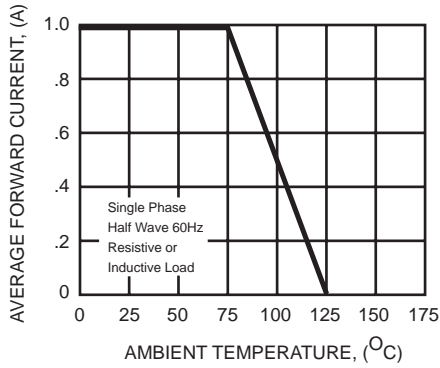


FIG. 2  
MAXIMUM NON-REPETITIVE FOREARD  
SURGE CURRENT

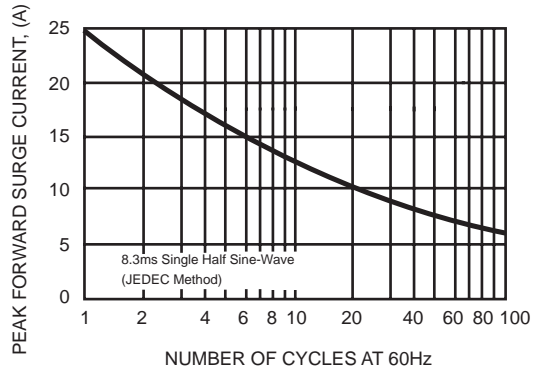


FIG.3  
TYPICAL INSTANTANEOUS FORWARD  
CHARACTERISTICS

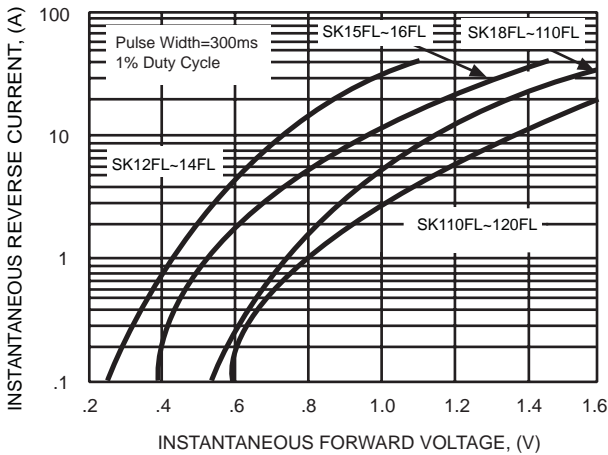
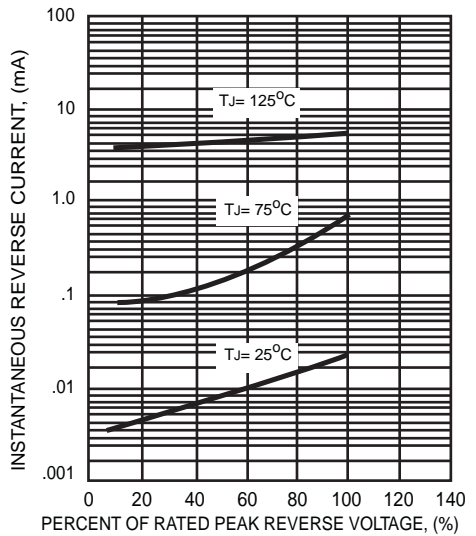


FIG.4  
TYPICAL REVERSE CHARACTERISTICS



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