

SM220 - SM260 SURFACE MOUNT SCHOTTKY BARRIER DIODES

VOLTAGE RANGE: 20-60V CURRENT: 2.0 A

Features

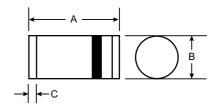
- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-O

Mechanical Data

- Case: LL41/DO-213
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch







| LL41/ DO-213AB | | | | | | |
|----------------------|--------------|------|--|--|--|--|
| Dim | Min | Мах | | | | |
| Α | 4.80 | 5.20 | | | | |
| В | 2.40 | 2.60 | | | | |
| С | 0.55 Nominal | | | | | |
| All Dimensions in mm | | | | | | |

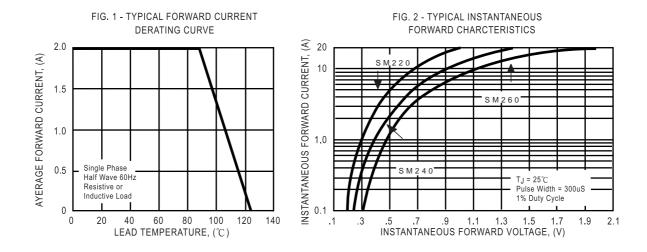
Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

| Characteristic | Symbol | SM220 | SM230 | SM240 | SM250 | SM 260 | Unit |
|-----------------------------------------------------------------------------------------------------------------------|--------------------|-------------|-------|-------|-------|--------|------|
| Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | Vrrm Vrwm Vr | 20 | 30 | 40 | 50 | 60 | V |
| RMS Reverse Voltage | VR(RMS) | 14 | 21 | 28 | 35 | 42 | V |
| Average Rectified Output Current $@T_L = 105^{\circ}C$ | lo | 2.0 | | | | А | |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | IFSM | 50 | | | | | A |
| Forward Voltage $@I_F = 2.0A$ | Vfm | 0.50 0.70 | | | | 0.70 | V |
| Peak Reverse Current $@T_A = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_A = 100^{\circ}C$ | IRM | 0.5 20 | | | | | mA |
| Typical Thermal Resistance (Note 1) | R∂JL R∂JA | 17 75 | | | | | °C/W |
| Operating Temperature Range | Tj | -65 to +125 | | | | °C | |
| Storage Temperature Range | Tstg | -65 to +150 | | | | | °C |

Note: 1. Mounted on P.C. Board with 8.0mm² copper pad area.

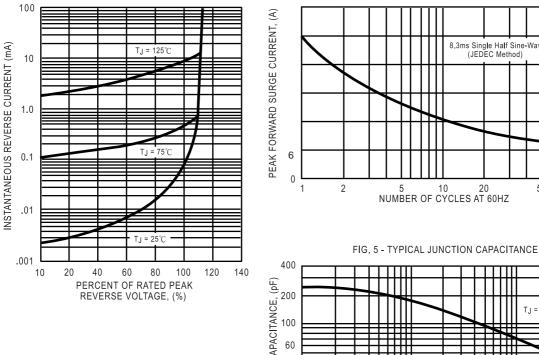




RATING AND CHARACTERISTIC CURVES (SM220 THRU SM260)



FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



8.3ms Single Half Sine-Wave (JEDEC Method) 5 10 20 NUMBER OF CYCLES AT 60HZ 50 100

