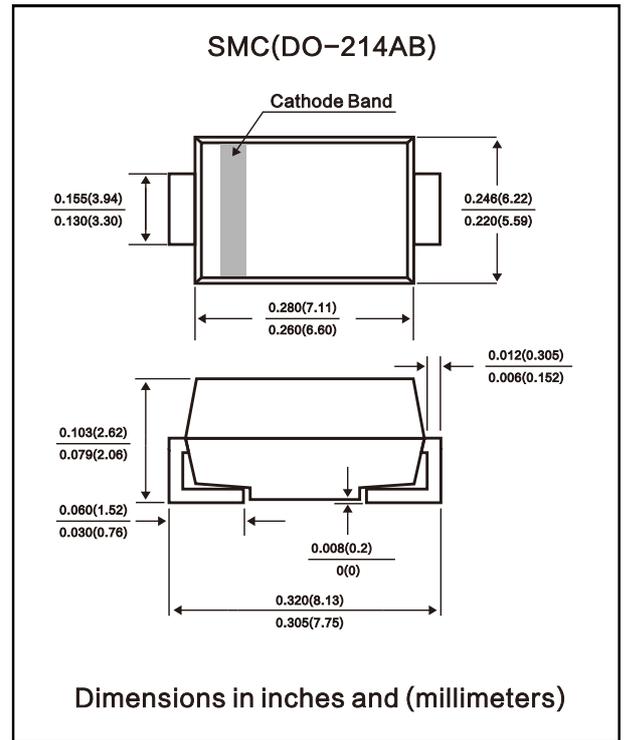


FEATURES

- Low cost
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with Alcohol, Isopropanol and similar solvents
- The plastic material carries U/L recognition 94V-0

MECHANICAL DATA

Case: JEDEC DO-214AB, molded plastic
 Terminals: Solderable per
 MIL- STD-202, Method 208
 Polarity: Color band denotes cathode
 Weight: 0.007 ounces, 0.21 grams
 Mounting position: Any


MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

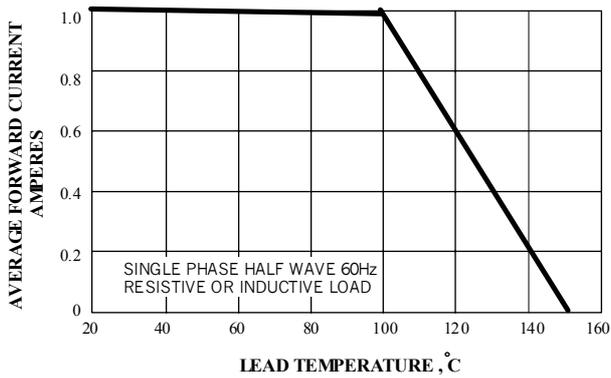
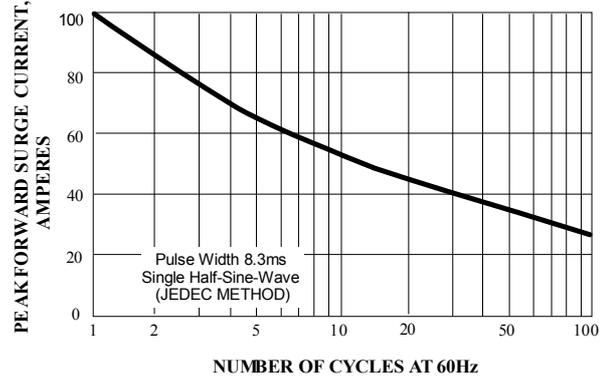
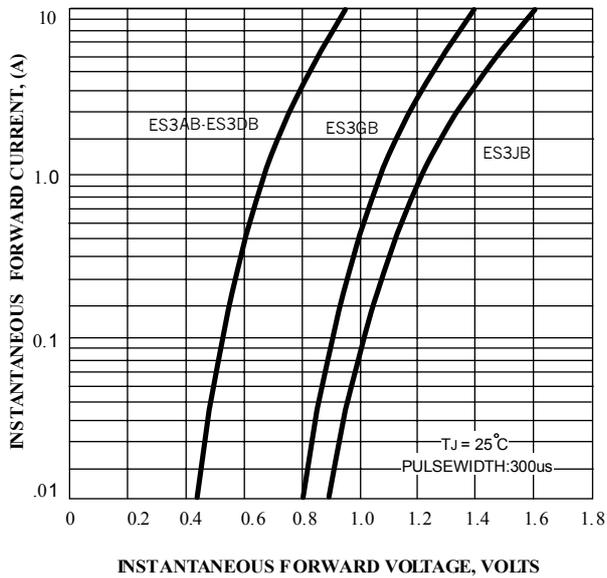
For capacitive load, derate current by 20%

| CHARACTERISTICS | SYMBOL | ES3A | ES3B | ES3D | ES3G | ES3J | ES3K | ES3M | UNIT | |
|---|------------|-------------|------|------|------|------|------|------|---------------------------|----|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V | |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| Maximum Average Forward Rectified Current @ $T_A=55^\circ\text{C}$ | $I_{(AV)}$ | 3.0 | | | | | | | A | |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method) | I_{FSM} | 125 | | | | | | | A | |
| Peak Forward Voltage at 3.0A DC | V_F | 0.95 | | 1.25 | | 1.70 | | | V | |
| Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_J=25^\circ\text{C}$ @ $T_J=100^\circ\text{C}$ | I_R | 5.0 100 | | | | | | | μA | |
| Maximum Reverse Recovery Time(Note 1) | T_{RR} | 35 | | | | | | | nS | |
| Typical Junction Capacitance (Note2) | C_J | 70 | | | | 45 | | | | pF |
| Typical Thermal Resistance (Note3) | R_{JA} | 20 | | | | | | | $^\circ\text{C}/\text{W}$ | |
| Operating Temperature Range | T_J | -55 to +150 | | | | | | | $^\circ\text{C}$ | |
| Storage Temperature Range | T_{STG} | -55 to +150 | | | | | | | $^\circ\text{C}$ | |

NOTES: 1.Measured with $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{RR}=0.25\text{A}$

2.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC

3.Thermal resistance junction to ambient.

RATINGS AND CHARACTERISTIC CURVES ES3A THRU ES3M
FIG.1 - FORWARD CURRENT DERATING CURVE

FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

FIG.3 - TYPICAL FORWARD CHARACTERISTICS

FIG.4 - TYPICAL REVERSE CHARACTERISTICS
