

MURS120

Surface Mount Rectifiers

VOLTAGE RANGE: 200 V

CURRENT: 1.0 A



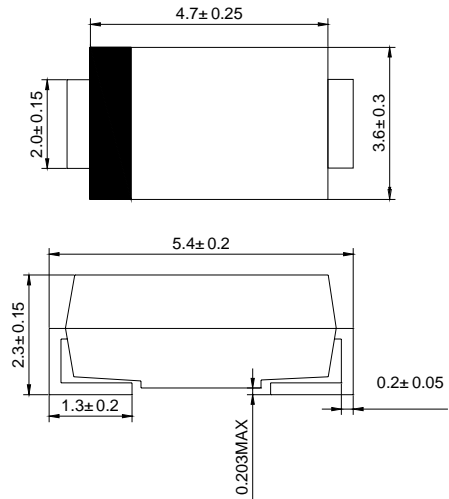
DO-214AA(SMB)

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-214AA, molded plastic
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.003 ounces, 0.093 gram
- ◇ Mounting position: Any



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

| | | MURS120 | UNITS |
|--|-----------------|-----------------|---------|
| Device marking code | | MD | |
| Maximum recurrent peak reverse voltage | V_{RRM} | 200 | V |
| Maximum RMS voltage | V_{RMS} | 140 | V |
| Maximum DC blocking voltage | V_{DC} | 200 | V |
| Maximum average forward rectified current | $I_{F(AV)}$ | 1.0 2.0 | A |
| Peak forward surge current | I_{FSM} | 40.0 | A |
| 8.3ms single half-sine-wave superimposed on rated load | | | |
| Typical reverse recovery time (Note1) | t_{rr} | 25 | ns |
| Maximum reverse current | I_R | 2.0 50.0 | μA |
| at rated DC blocking voltage | | | |
| Maximum instantaneous forward voltage at 1.0 A | V_F | 0.875 0.71 | V |
| Typical thermal resistance (Note2) | $R_{\theta JL}$ | 13.0 | °C/W |
| Operating junction temperature range | T_J | - 65 ---- + 175 | °C |
| Storage temperature range | T_{STG} | - 65 ---- + 175 | °C |

NOTE: 1. Measured with $I_F=0.5A$, $I_R=1A$, $I_{rr}=0.25A$.

2. Junction to ambient.

Ratings AND Characteristic Curves

FIG.1 – TYPICAL FORWARD CHARACTERISTIC

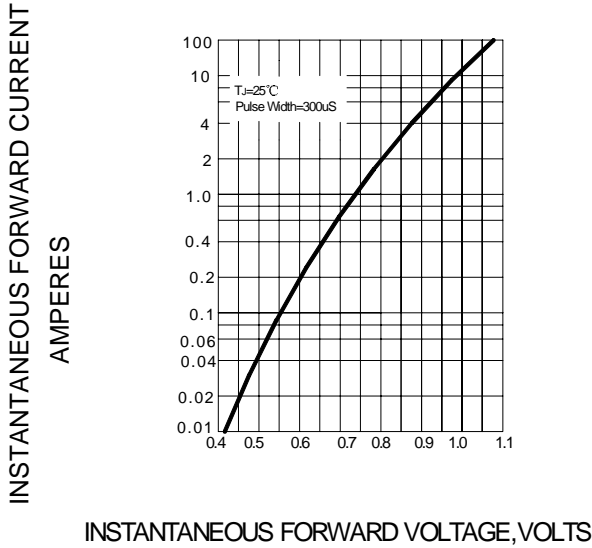


FIG.2 -- TYPICAL REVERSE LEAKAGE CHARACTERISTICS

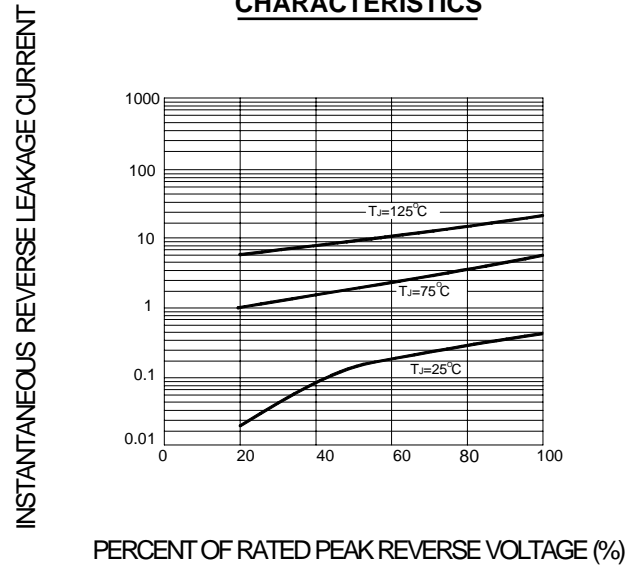


FIG.3 – PEAK FORWARD SURGE CURRENT

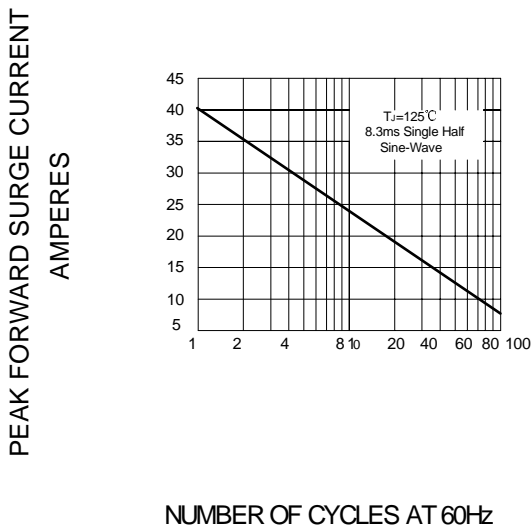


FIG.4 – FORWARD DERATING CURVE

