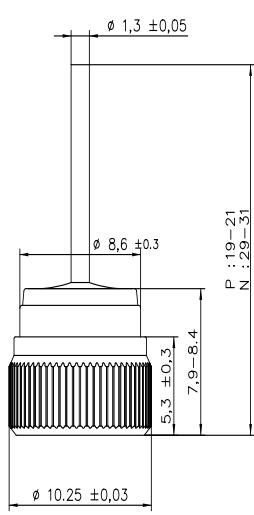


Description



Mechanical Dimensions



LUCAS

Dimensions in inches and (millimeters)

Features

- ★ Low forward voltage drop
- ★ High current capability
- ★ High reliability
- ★ High surge current capability

Mechanical Data

- ★ Case: OFC Heat Sink
- ★ Encap: Epoxy Sealed Rated  
UL94V-0
- ★ Weight: 4.0 - 4.5 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

|                                                                                                         | SYMBOL   | FL3518      | FL3520 | FL3530 | UNIT     |
|---------------------------------------------------------------------------------------------------------|----------|-------------|--------|--------|----------|
| Maximum Peak Repetitive Reverse Voltage@Irrm=10uA                                                       | VRRM     | 19-24       | 24-32  | 24-45  | V        |
| Maximum RMS Voltage                                                                                     | VRMS     | 16          | 20     | 28     | V        |
| Maximum DC Blocking Voltage(TA=25°C)                                                                    | VB       | 16          | 20     | 28     | V        |
| Maximum Average Forward Current Io@Tc=150°C<br>60 Hz, resistive or inductive load                       | I(AV)    | 35          |        |        | A        |
| Peak Forward Surge Current, 8.3ms single<br>Half sine-wave superimposed on rated load<br>(JEDEC method) | IFSM     | 450         |        |        | A        |
| Maximum Inst. Forward Voltage Drop,<br>IF at 80Amp                                                      | VF       | 1.15        |        |        | V        |
| Maximum DC Reverse Current (VB)@TJ=25°C<br>At Rated DC Blocking Voltage (VB)@TJ=175°C                   | IR       | 10<br>300   |        |        | uA<br>uA |
| Operating Junction and Storage Temperature Range                                                        | TJ, TSTG | -40 to +175 |        |        | °C       |

## RATINGS AND CHARACTERISTIC CURVES

FL3518 – FL3530

FIG.1 - FORWARD CURRENT DERATING CURVE

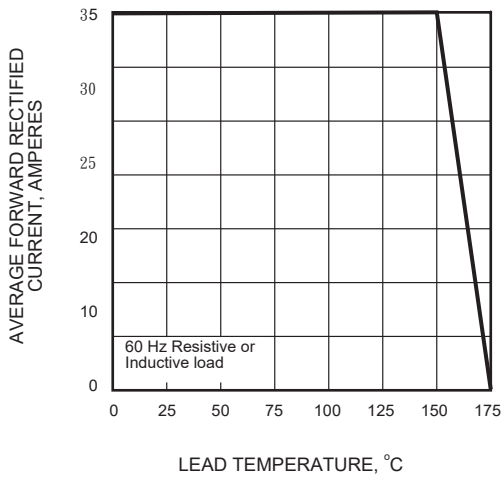


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

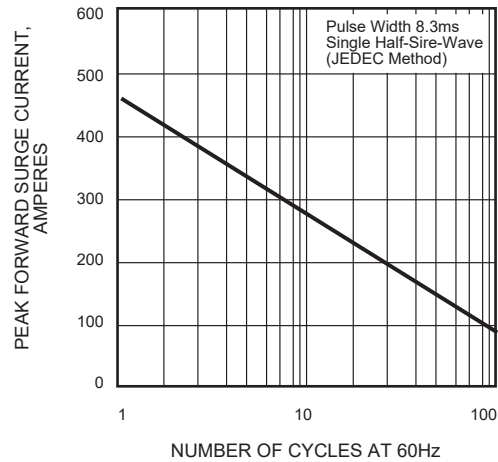


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

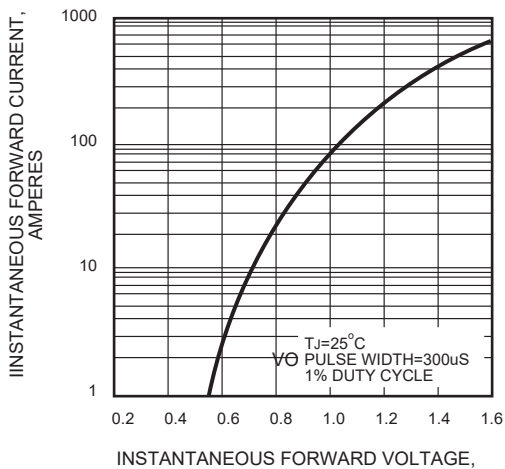


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

