

SILICON PRESS-FIT DIODES

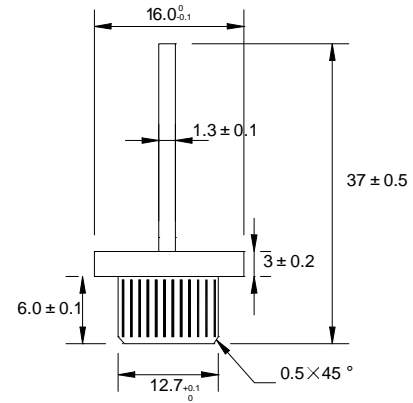
VOLTAGE RANGE: 200 -- 600 V

CURRENT: 50 A

FEATURES

- ◇ Nominal current 50A
- ◇ Repetitive peak reverse voltage 600 V
- ◇ Metal press -fit case with plastic cover

ZQL3



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

| Wire to anode | | ZQ50A2L3 | ZQ50A4L3 | ZQ50A6L3 | UNITS |
|---|-------------|----------------|----------|----------|----------------------|
| Wire to cathode | | ZQ50K2L3 | ZQ50K4L3 | ZQ50K6L3 | |
| Repetitive peak reverse voltage | V_{RRM} | 200 | 400 | 600 | V |
| Surge peak reverse voltage | V_{RSM} | 240 | 480 | 700 | V |
| Max.average forward rectified current, R-load @ $T_A=55^\circ\text{C}$ | $I_{F(AV)}$ | 50 | | | A |
| Repetitive peak forward current $f > 15\text{Hz}$ (NOTE1) | I_{FRM} | 110 | | | A |
| Peak forward surge current,50/60 Hz half sine-wave | I_{FSM} | 450/500 | | | A |
| Forward voltage @ $I_F=50\text{A}$ | V_F | 1.1 | | | V |
| Leakage current @ $T_j=25^\circ\text{C}$ | I_R | 100 | | | μA |
| Rating for fusing $t < 10\text{ms}$ | i^2t | 800 | | | A^2S |
| Thermal resistance junction to case | R_{thc} | 0.7 | | | K/W |
| Operating junction temperature | T_j | - 55 --- + 215 | | | $^\circ\text{C}$ |
| Storage temperature range | T_s | - 55 --- + 215 | | | $^\circ\text{C}$ |

NOTE: Max.case temperature $T_c=150^\circ\text{C}$ -Max.

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FIG.1 – TYPICAL FORWARD CHARACTERISTIC

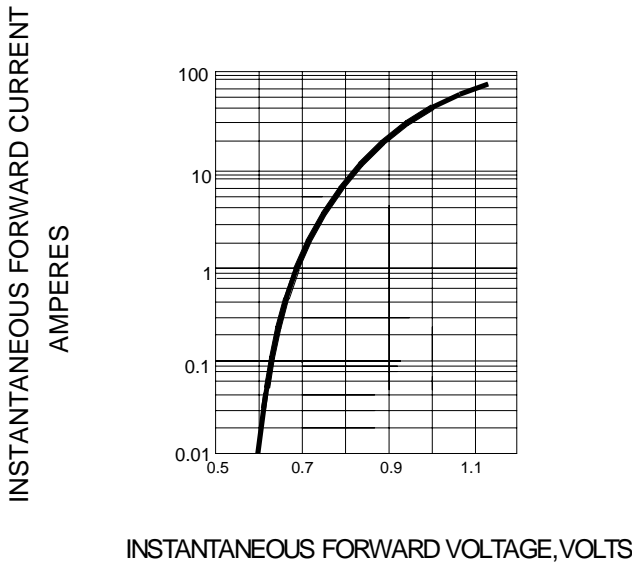


FIG.2 – FORWARD DERATING CURRENT

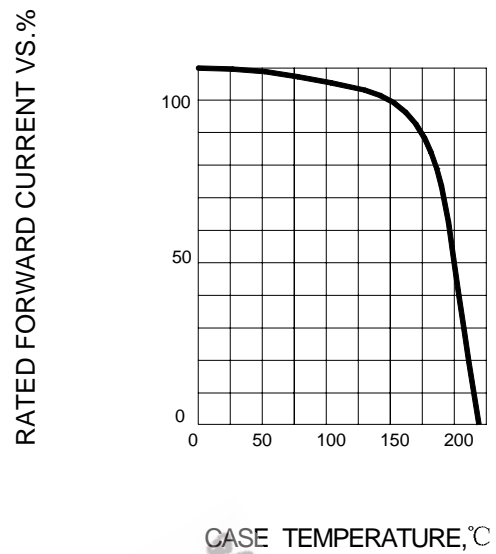


FIG.3 – PEAK FORWARD SURGE CURRENT

