

### SILICON PRESS-FIT DIODES

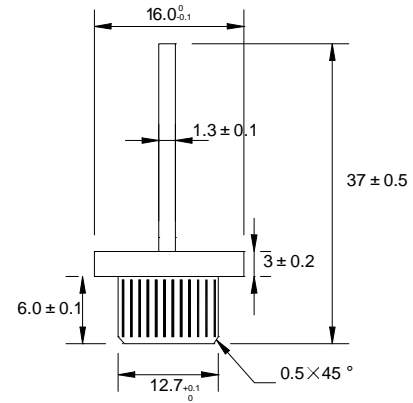
VOLTAGE RANGE: 200 -- 600 V

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

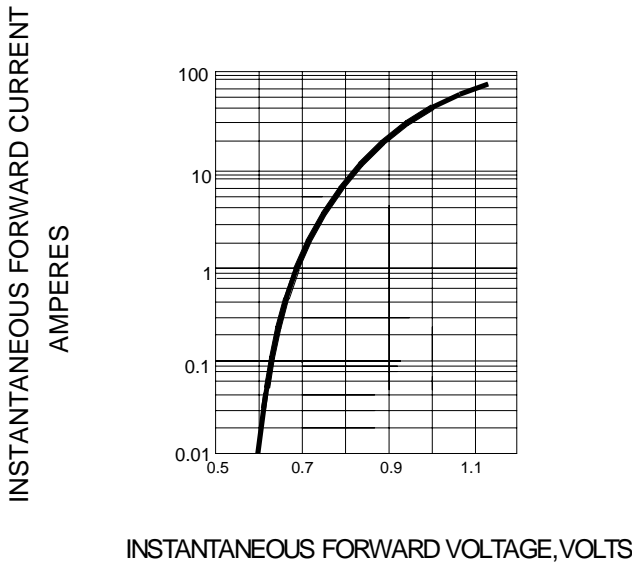
Ratings at 25°C ambient temperature unless otherwise specified.

| 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,<br>R-load @ $T_A=55^\circ\text{C}$ | $I_{F(AV)}$ | 50             |          |          | A                    |
| Repetitive peak forward current<br>$f > 15\text{Hz}$ (NOTE1)              | $I_{FRM}$   | 110            |          |          | A                    |
| Peak forward surge current,50/60 Hz<br>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            |          |          | $\mu\text{A}$        |
| Rating for fusing $t < 10\text{ms}$                                       | $i^2t$      | 800            |          |          | $\text{A}^2\text{S}$ |
| 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 |          |          | $^\circ\text{C}$     |

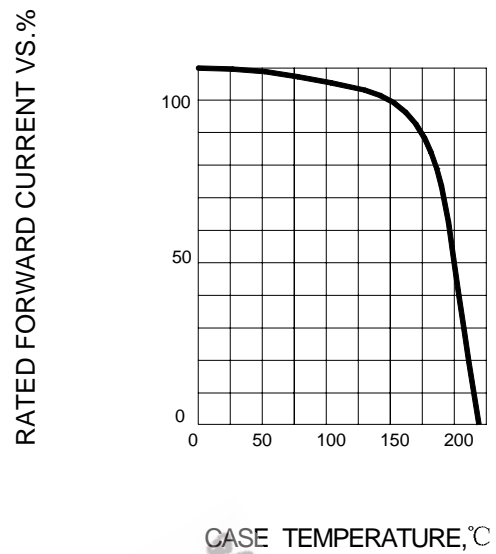
NOTE: Max.case temperature  $T_c=150^\circ\text{C}$ -Max.

www.galaxycn.com

**FIG.1 – TYPICAL FORWARD CHARACTERISTIC**



**FIG.2 – FORWARD DERATING CURRENT**



**FIG.3 – PEAK FORWARD SURGE CURRENT**

