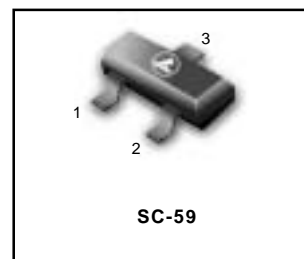


SCHOTTKY BARRIER DIODE

LRB491T1

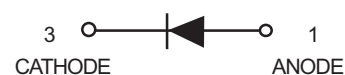
FEATURE

- Silicon epitaxial planar.
- Small plastic SMD package.
- High current capacity($I_F=1.0A$).
- Ultra low V_F . ($V_F=0.40V$ Typ. at 1A)
- For switching power supply Applications.
- Pb-Free Package is available.



DEVICE MARKING AND ORDERING INFORMATION

| Device | Marking | Shipping |
|-----------|------------------|----------------|
| LRB491T1 | 10T | 3000/Tape&Reel |
| LRB491T1G | 10T (Pb-Free) | 3000/Tape&Reel |



MAXIMUM RATINGS($T_a=25^{\circ}C$)

| Parameter | Symbol | Limits | Unit |
|------------------------------|-----------|----------|-------------|
| Peak reverse voltage | V_{RM} | 25 | V |
| DC reverse voltage | V_R | 20 | V |
| DC forward current | I_F | 1.0 | A |
| Peak forward surge current * | I_{FSM} | 3 | A |
| Junction temperature | T_j | 125 | $^{\circ}C$ |
| Storage temperature | T_{stg} | -40~+125 | $^{\circ}C$ |

* 60Hz for 1 μ s

ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}C$)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|-----------------|--------|------|------|------|---------|------------|
| Forward voltage | V_F | - | - | 0.45 | V | $I_F=1.0A$ |
| Reverse current | I_R | - | - | 200 | μA | $V_R=20V$ |

Note) ESD sensitive product handling required.

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ELECTRICAL CHARACTERISTIC CURVES(Ta=25°C)

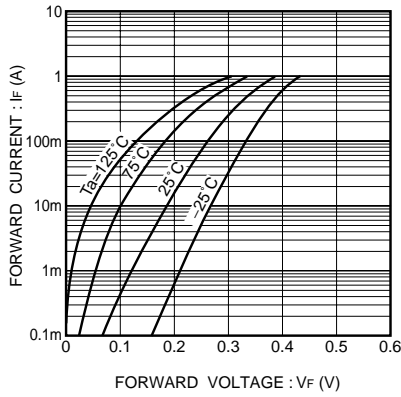


Fig.1 Forward characteristics

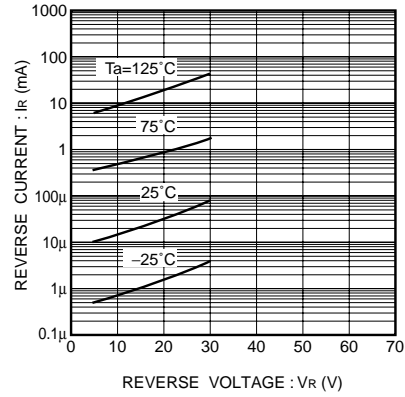


Fig.2 Reverse characteristics

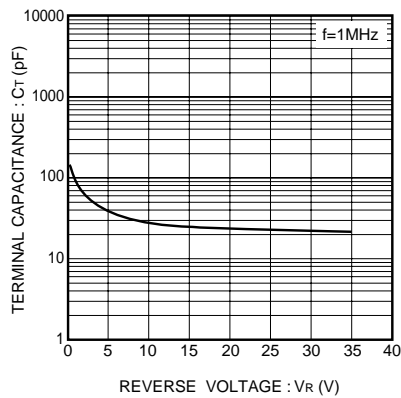


Fig.3 Capacitance between terminals characteristics

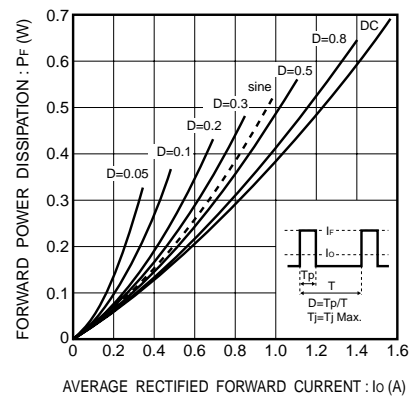


Fig.4 Forward power dissipation characteristics

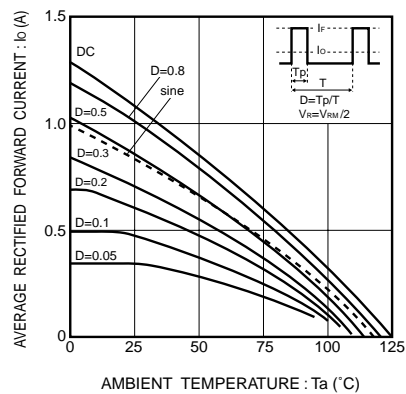
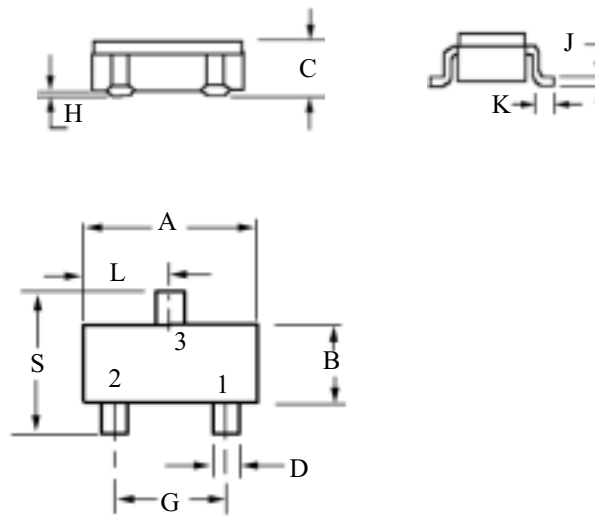


Fig.5 Derating curve ($I_o - T_a$)

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| DIN | MILLIMETERS | | INCHES | |
|-----|-------------|-------|--------|---------|
| | MIN | MAX | MIN | MAX |
| A | 2.70 | 3.10 | 0.1063 | 0.1220 |
| B | 1.3 | 1.70 | 0.0512 | 0.0669 |
| C | 1.00 | 1.30 | 0.0394 | 0.0511 |
| D | 0.35 | 0.50 | 0.0138 | 0.0196 |
| G | 1.70 | 2.10 | 0.0670 | 0.0826 |
| H | 0.0130 | 0.100 | 0.0005 | 0.00040 |
| J | 0.1 | 0.26 | 0.0040 | 0.0102 |
| K | 0.20 | 0.60 | 0.0079 | 0.0236 |
| L | 1.25 | 1.65 | 0.0493 | 0.0649 |
| S | 2.50 | 3.00 | 0.0985 | 0.1181 |