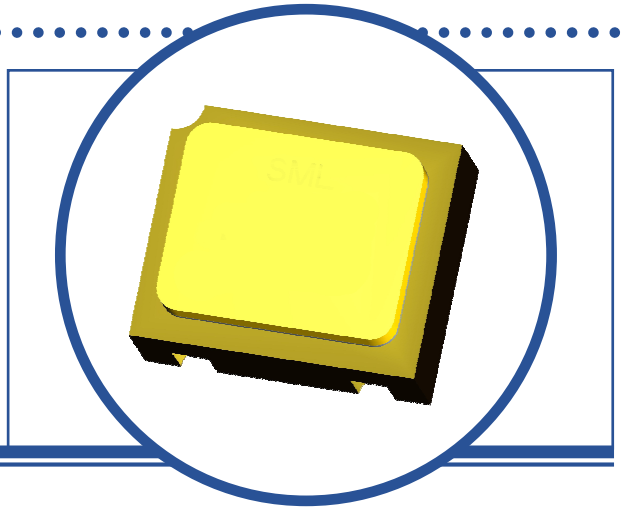
# SCHOTTKY BARRIER DIODE

TT electronics
Semelab Limited

## 1N5711CSM

- High Breakdown Voltage ($V_{BR}$ = 70V)
- Low Forward Voltage
- Hermetic Ceramic Surface Mount Package
- Suitable for Low Current, Fast Switching Applications.
- Screening Options Available



## ABSOLUTE MAXIMUM RATINGS ($T_A$ = 25°C unless otherwise stated)

| | | | |
|---|---|---|---|
| $V_{BR}$ | Breakdown Voltage | | 70V |
| $V_{RRM}$ | Repetitive Peak Reverse Voltage | | 70V |
| $I_F$ | Forward Current | | 15mA |
| $P_D$ | Total Power Dissipation at | $T_A$ = 25°C | 250mW |
| | | Derate Above 25°C | 2.5mW/°C |
| $T_J$ | Junction Temperature Range | | -55 to +125°C |
| $T_{stg}$ | Storage Temperature Range | | -65 to +150°C |

### THERMAL PROPERTIES

| Symbols | Parameters | Max. | Units |
|---|---|---|---|
| $R_{\theta JA}$ | Thermal Resistance, Junction To Ambient | 400 | °C/W |



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## ELECTRICAL CHARACTERISTICS ($T_A$ = 25°C unless otherwise stated)

| Symbols | Parameters | Test Conditions | | Min. | Typ | Max. | Units |
|---|---|---|---|---|---|---|---|
| $V_{BR}$ | Breakdown Voltage | $I_R$ = 10µA | | 70 | | | V |
| $V_F$ (1) | Forward Voltage | $I_F$ = 1.0mA | | | | 0.41 | |
| | | $I_F$ = 15mA | | | | 1.0 | |
| | | | $T_A$ = -55°C | | | 1.1 | |
| $I_R$ | Reverse Current | $V_R$ = 50V | | | | 200 | nA |
| | | | $T_A$ = 125°C | | | 200 | µA |

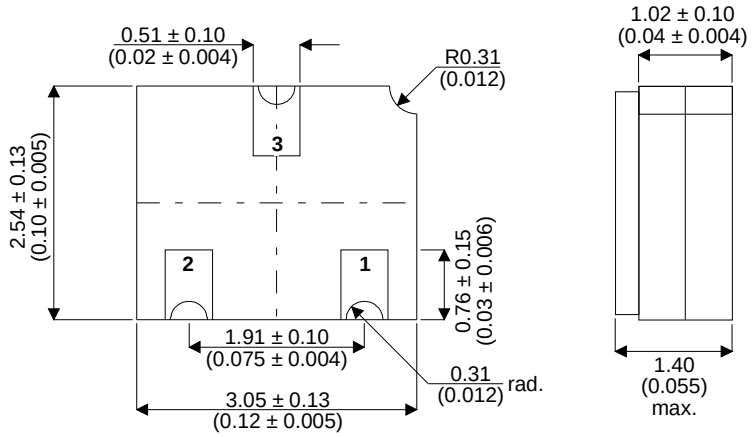
## DYNAMIC CHARACTERISTICS

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| $C_T$ | Capacitance | $V_R$ = 0V | f = 1.0MHz | | 2.2 | 2.5 | pF |
| $\tau$ (2) | Minority Carrier Lifetime | $I_F$ = 5mA | | | | 100 | ps |

**Notes**
(1) Pulse Width ≤ 300us, δ ≤ 2%
(2) By design only, not a production test.

## MECHANICAL DATA

Dimensions in mm (inches)




**LCC1**
**(Underside View)**

Pad 1 - Anode Pad 2 – N/C Pad 3 - Cathode