# 1SS277WT

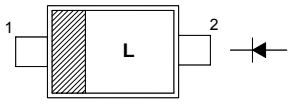
## BAND SWITCHING DIODE

### Applications

- Low loss band switching in VHF television tuners
- Surface mount band switching circuits

PINNING

| PIN | DESCRIPTION |
|---|---|
| 1 | Cathode |
| 2 | Anode |



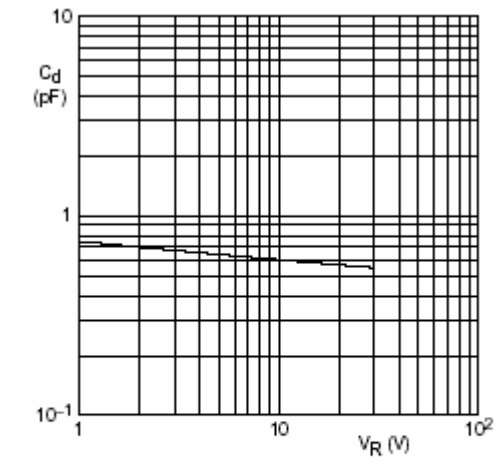

Top View
Marking Code: "**L**"
Simplified outline SOD-523 and symbol

### Absolute Maximum Ratings ($T_a$ = 25 °C)

| Parameter | Symbol | Value | Unit |
|---|---|---|---|
| Reverse Voltage | $V_R$ | 35 | V |
| Continuous Forward Current | $I_F$ | 100 | mA |
| Power Dissipation ($T_S$ = 90 °C) | $P_{tot}$ | 715 | mW |
| Junction Temperature | $T_J$ | - 65 to + 175 | °C |
| Storage Temperature Range | $T_{stg}$ | - 65 to + 175 | °C |

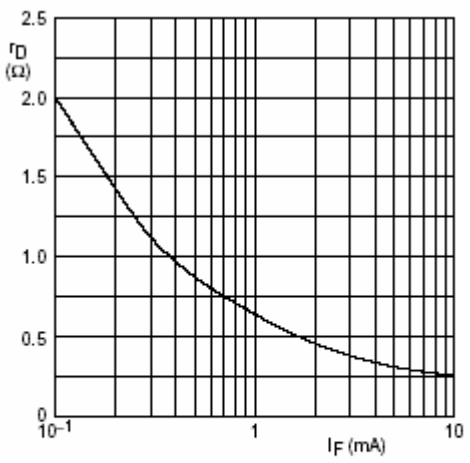
### Characteristics at $T_a$ = 25 °C

| Parameter | Symbol | Min. | Max. | Unit |
|---|---|---|---|---|
| Forward Voltage at $I_F$ = 10 mA | $V_F$ | - | 1 | V |
| Reverse Voltage at $I_R$ = 10 µA | $V_R$ | 35 | - | V |
| Reverse Current at $V_R$ = 25 V | $I_R$ | - | 50 | nA |
| Diode Forward Resistance at $I_F$ = 2 mA, f = 100 MHz | $r_f$ | - | 0.7 | Ω |
| Capacitance at f = 1 MHz, $V_R$ = 6 V | $C_d$ | - | 1.2 | pF |




f = 1 MHz; $T_j$ = 25 °C.

Fig. 1 Diode capacitance as a function of reverse voltage; typical values.




f = 100 MHz; $T_j$ = 25 °C.

Fig. 2 Diode forward resistance as a function of forward current; typical values.

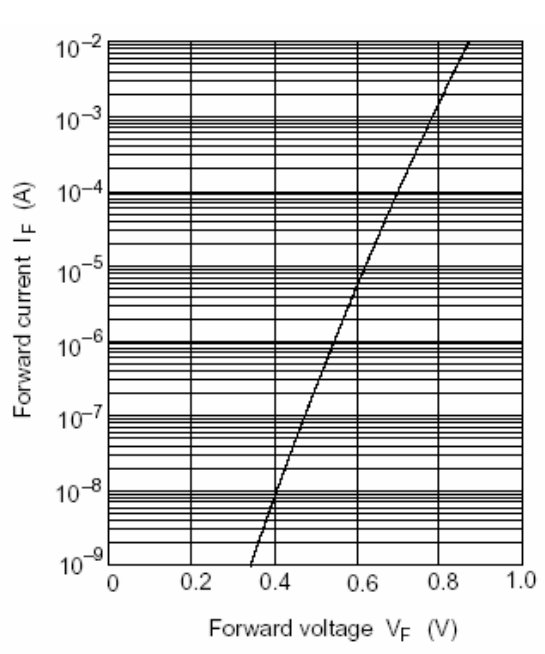



**Fig. 3 Forward current Vs. Forward voltage**

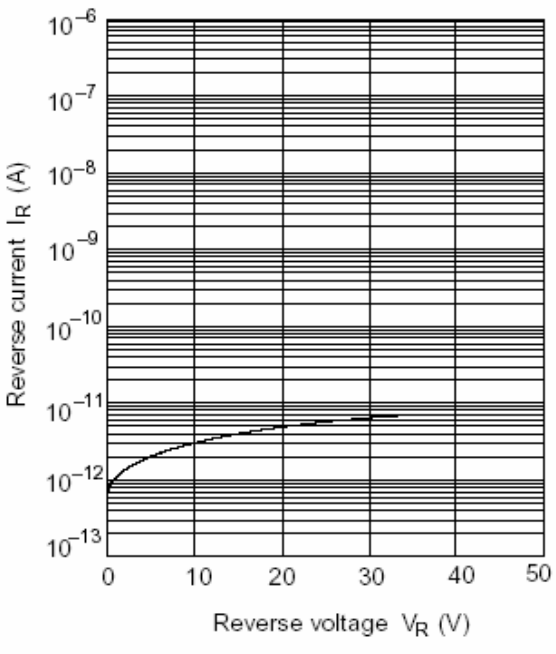



**Fig. 4 Reverse current Vs. Reverse voltage**

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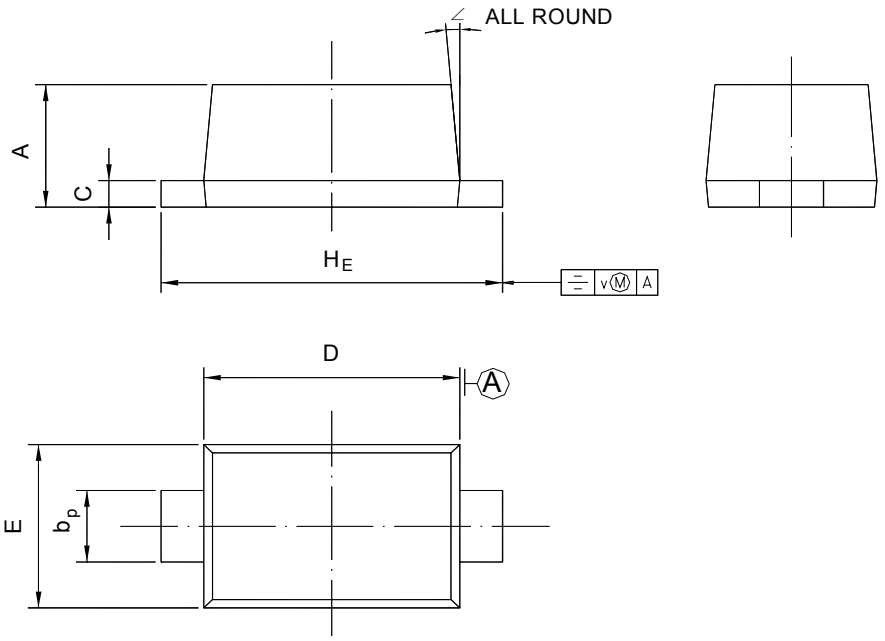
## PACKAGE OUTLINE

**Plastic surface mounted package; 2 leads** **SOD-523**




| UNIT | A | $b_p$ | C | D | E | $H_E$ | V | ∠ |
|---|---|---|---|---|---|---|---|---|
| mm | 0.70<br>0.60 | 0.4<br>0.3 | 0.135<br>0.127 | 1.25<br>1.15 | 0.85<br>0.75 | 1.7<br>1.5 | 0.1 | 5° |