

Surface Mount Schottky Barrier Diodes

(Pb) Lead(Pb)-Free

* Halogen Free

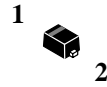
Feature:

- * Silicon Epitaxial Planer
- * Low Forward Voltage and Low Reverse Current
- * High Reliability
- * Schottky Barrier Diodes Encapsulated in a SOD-923 Package

Description:

These schottky barrier diodes are designed for high speed switching applications circuit protection, and voltage clamping. Extremely low forward voltage reduces conduction loss. Miniature surface mount package is excellent for hand held and portable applications where space is limited.

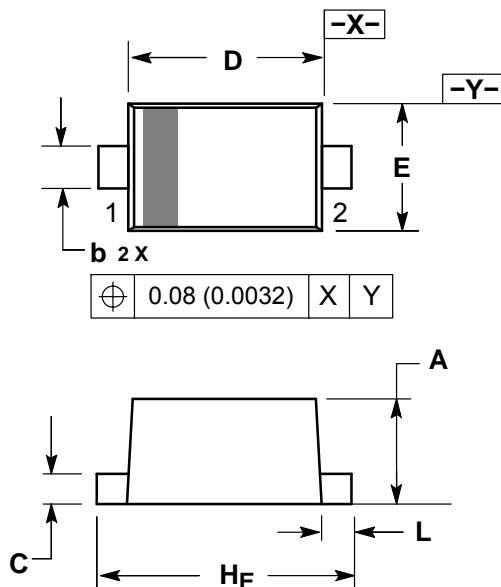
**SMALL SIGNAL
SCHOTTKY DIODES
30m AMPERES
40 VOLTS**



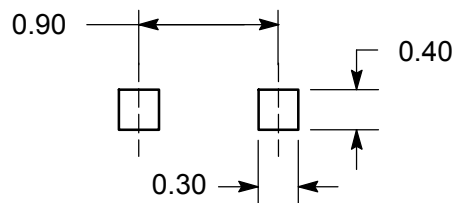
SOD-923

SOD-923 Outline Dimensions

Unit:mm



| MILLIMETERS | | | |
|-------------|------|------|------|
| DIM | MIN | NOM | MAX |
| A | 0.34 | 0.39 | 0.43 |
| b | 0.15 | 0.20 | 0.25 |
| c | 0.07 | 0.12 | 0.17 |
| D | 0.75 | 0.80 | 0.85 |
| E | 0.55 | 0.60 | 0.65 |
| HE | 0.95 | 1.00 | 1.05 |
| L | 0.05 | 0.10 | 0.15 |



SOLDERING FOOTPRINT


Maximum Ratings ($T_A=25^{\circ}\text{C}$ Unless otherwise noted)

| Characteristic | Symbol | Value | Unit |
|---|-----------------|-------------|-----------------------------|
| Repetitive Peak Reverse Voltage | V_{RM} | 40 | V |
| DC Reverse Voltage | V_R | 30 | V |
| Average Rectifier Forward Current | I_O | 30 | mA |
| Peak Forward Surge Current ⁽¹⁾ | I_{FSM} | 200 | mA |
| Thermal Resistance, Junction to Ambient | $R_{\theta JA}$ | 520 | $^{\circ}\text{C}/\text{W}$ |
| Power Dissipation | PD | 150 | mW |
| Operation Junction Temperature Range | T_J | 125 | $^{\circ}\text{C}$ |
| Storage Temperature Range | T_{stg} | -40 to +125 | $^{\circ}\text{C}$ |

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ Unless otherwise noted)

| Characteristic | Symbol | Min | Typ | Max | Unit |
|---|--------|-----|-----|------|---------------|
| Forward Voltage $I_F=1\text{mA}$ | V_F | - | - | 0.37 | V |
| Reverse Leakage $V_R=30\text{V}$ | I_R | - | - | 0.5 | μA |
| Capacitance between terminals $V_R=1\text{V}, f=1\text{MHz}$ | C_t | - | 2 | - | pF |

Device Marking

| Item | Marking | Equivalent Circuit diagram |
|---------|---------|---|
| WSD751D | 5 |  |

Electrical Characteristic Curves ($T_A=25^\circ\text{C}$)

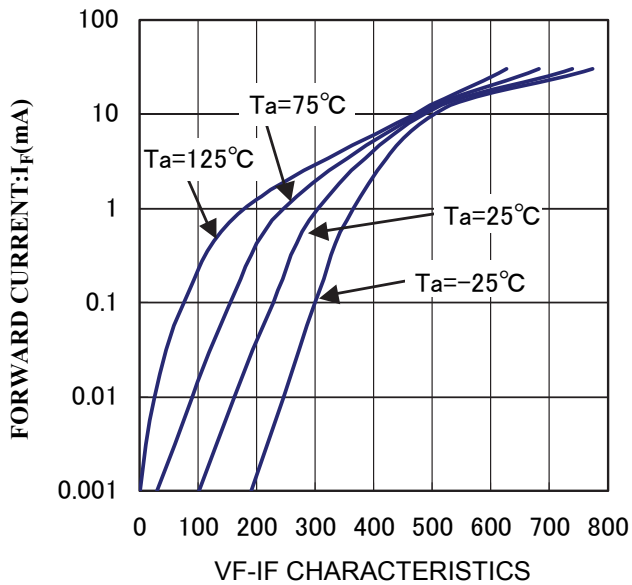


Fig.1 FORWARD VOLTAGE : VF(mV)

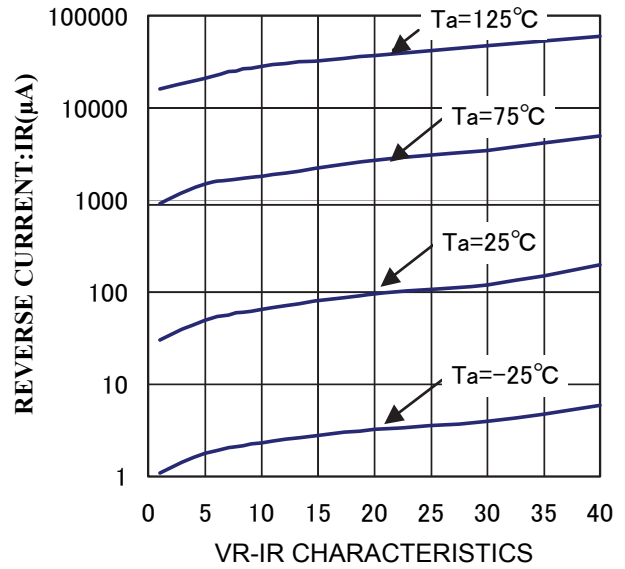


Fig.2 REVERSE VOLTAGE: V_R (V)

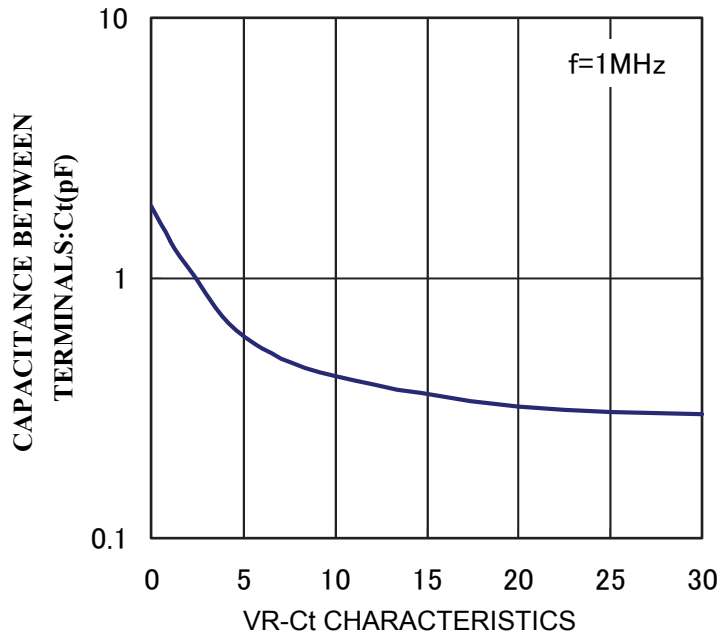


Fig.3 REVERSE VOLTAGE: V_R (V)