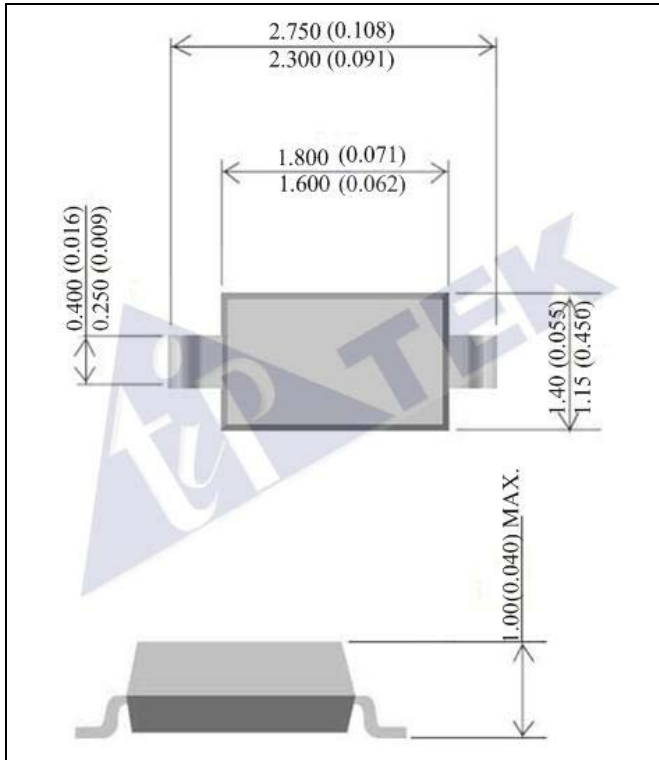


SCHOTTKY BARRIER DIODES



CASE : SOD-323

DIMENSIONS IN MILLIMETERS AND (INCHES)

FEATURES

- EXTREMELY FAST SWITCHING SPEED
- LOW FORWARD VOLTAGE -- 0.35 V(TYP) $I_F=10\text{mA}$

MECHANICAL DATA

- CASE : SOD-323, PLASTIC
- TERMINALS : SOLDERABLE PER MIL-STD-202, METHOD208
- APPROX. WEIGHT:0.00465 GRAM
- Halogen Free: BAT54H-H

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED.

| PARAMETER | SYMBOL | BAT54H | UNITS |
|---|-----------------|---------------|-----------------------------|
| PEAK REPETITIVE REVERSE VOLTAGE | V_{RRM} | 30 | V |
| MAXIMUM AVERAGE FORWARD CURRENT | I_F | 0.2 | A |
| PEAK FORWARD SURGE CURRENT, $t < 1.0\text{s}$ (JEDEC METHOD) | I_{FSM} | 0.6 | A |
| THERMAL RESISTANCE, JUNCTION TO AMBIENT | $R_{\theta JA}$ | 635 | $^{\circ}\text{C}/\text{W}$ |
| JUNCTION TEMPERATURE | T_J | - 55 TO + 125 | $^{\circ}\text{C}$ |
| STORAGE TEMPERATURE | T_{STG} | - 55 TO +125 | $^{\circ}\text{C}$ |

ELECTRICAL CHARACTERISTICS (AT $T_A = 25^{\circ}\text{C}$ UNLESS OTHERWISE NOTED)

| PARAMETER | SYMBOL | MIN | TYP | MAX | UNITS |
|---|-------------|-----|--------------------------------------|-----------------------------------|---------------|
| REVERSE BREAKDOWN VOLTAGE($I_R=10 \mu\text{A}$) | $V_{(BR)R}$ | 30 | - | - | V |
| REVERSE LEAKAGE ($V_R=25\text{V}$) | I_R | - | 0.5 | 2.0 | μA |
| FORWARD VOLTAGE ($I_F = 0.1\text{mA}$) ($I_F = 1.0\text{mA}$) ($I_F = 10\text{mA}$) ($I_F = 30\text{mA}$) ($I_F = 100\text{mA}$) | V_F | - | 0.22 0.29 0.35 0.41 0.52 | 0.24 0.32 0.4 0.5 1.0 | V |
| REVERSE RECOVERY TIME($I_F=I_R=10\text{mA}$, $I_{R(REC)}=1.0\text{mA}$) | t_{rr} | - | - | 5.0 | ns |
| TOTAL CAPACITANCE($V_R=1.0\text{V}$, $f=1.0\text{MHz}$) | C_T | - | 7.6 | 10 | pF |

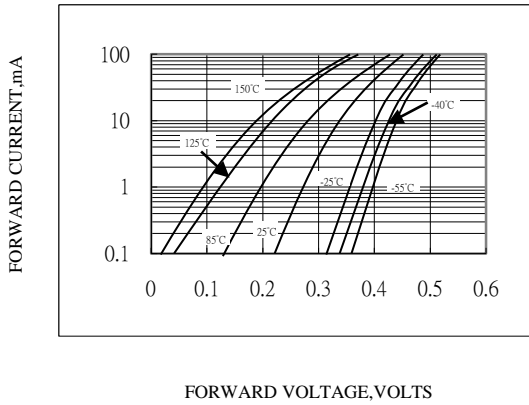


Fig.1-TYPICAL FORWARD CHARACTERISTIC

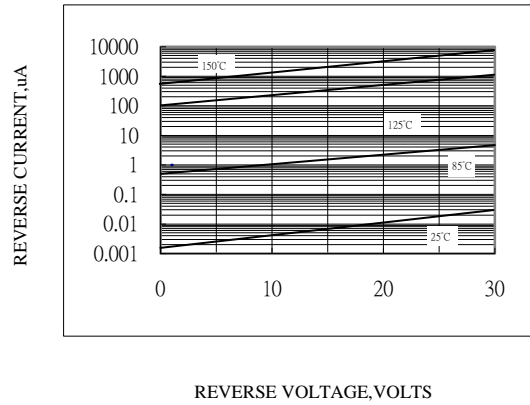


Fig.2-TYPICAL REVERSE CHARACTERISTICS

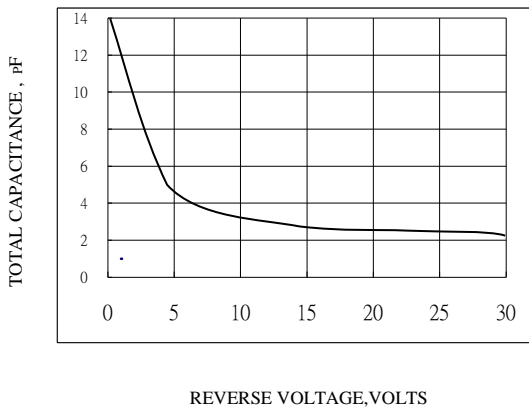


Fig.3-TYPICAL JUNCTION CAPACITANCE