

## Schottky Barrier Diode

- \* Halogen-free type
- \* Lead free product
- \* Small surface mounting type
- \* Low reverse current and low forward voltage
- \* High reliability

**RB520G-30GH**



CATHODE 1 → ANODE 2

### MAXIMUM RATINGS

| Rating                                                       | Symbol           | Value       | Unit |
|--------------------------------------------------------------|------------------|-------------|------|
| Maximum Recurrent Peak Reverse Voltage                       | V <sub>RRM</sub> | 30          | V    |
| Maximum Average Forward Rectified Current                    | I <sub>o</sub>   | 100         | mA   |
| Peak Forward Surge Current at 8.3 mSec single half sine-wave | I <sub>FSM</sub> | 500         | mA   |
| Maximum Junction Temperature Range                           | T <sub>J</sub>   | +125        |      |
| Storage Temperature Range                                    | T <sub>STG</sub> | -40 to +125 |      |

### DEVICE MARKING

**RB520G-30GH = E**

### ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

|                                                               |                |      |    |
|---------------------------------------------------------------|----------------|------|----|
| Maximum Instantaneous Forward Voltage at I <sub>F</sub> =10mA | V <sub>F</sub> | 0.45 | V  |
| Maximum Average Reverse Current at V <sub>R</sub> =10V        | I <sub>R</sub> | 0.5  | μA |



FIG. 1 - FORWARD CHARACTERISTICS

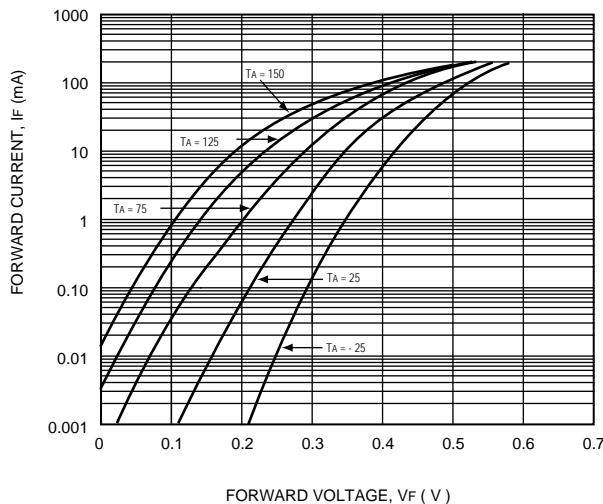


FIG. 2 - REVERSE CHARACTERISTICS

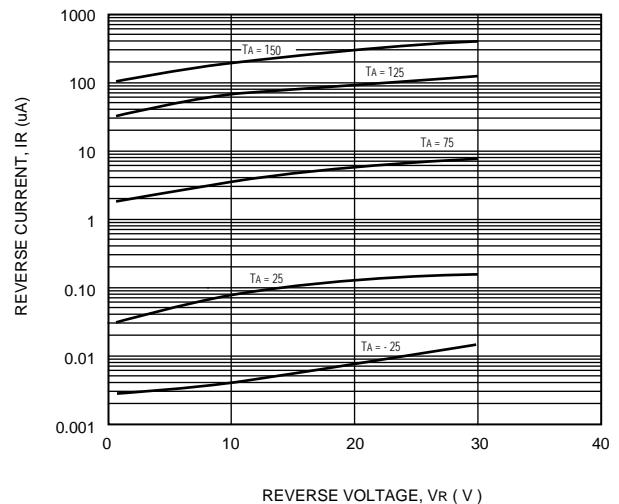
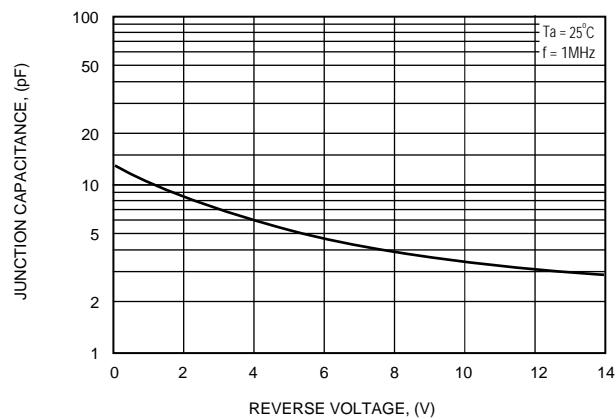


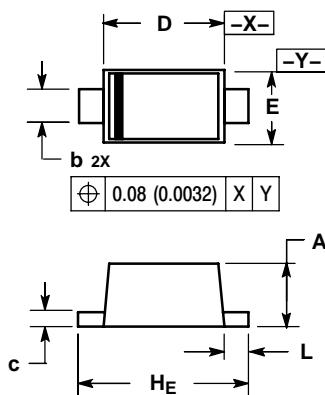
FIG. 3 - TYPICAL JUNCTION CAPACITANCE





## CASE DRAWINGS

### SOD-723



#### NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETER.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH THICKNESS. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.

| DIM            | MILLIMETERS |      |      | INCHES |        |        |
|----------------|-------------|------|------|--------|--------|--------|
|                | MIN         | NOM  | MAX  | MIN    | NOM    | MAX    |
| A              | 0.49        | 0.52 | 0.55 | 0.019  | 0.020  | 0.022  |
| b              | 0.25        | 0.28 | 0.32 | 0.0098 | 0.011  | 0.013  |
| c              | 0.08        | 0.12 | 0.15 | 0.0032 | 0.0047 | 0.0059 |
| D              | 0.95        | 1.00 | 1.05 | 0.037  | 0.039  | 0.041  |
| E              | 0.55        | 0.60 | 0.65 | 0.022  | 0.024  | 0.026  |
| H <sub>E</sub> | 1.35        | 1.40 | 1.45 | 0.053  | 0.055  | 0.057  |
| L              | 0.15        | 0.20 | 0.25 | 0.006  | 0.0079 | 0.010  |

### SOLDERING FOOTPRINT\*

