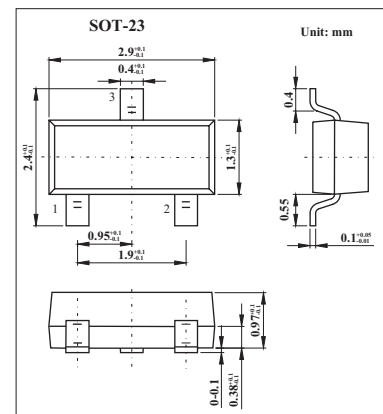


## Silicon PIN Diodes

## BA779;BA779S

## ■ Features

- Wide frequency range 10 MHz to 1 GHz

■ Absolute Maximum Ratings  $T_a = 25^\circ\text{C}$ 

| Parameter                 | Symbol     | Test Conditions             | Value       | Unit             |
|---------------------------|------------|-----------------------------|-------------|------------------|
| Reverse Voltage           | $V_R$      |                             | 30          | V                |
| Forward Current           | $I_F$      |                             | 50          | mA               |
| Junction Temperature      | $T_j$      |                             | 125         | $^\circ\text{C}$ |
| Storage temperature range | $T_{stg}$  |                             | -55 to +125 | $^\circ\text{C}$ |
| Junction ambient          | $R_{thJA}$ | on PC board 50mm×50mm×1.6mm | 500         | K/W              |

■ Electrical Characteristics  $T_a = 25^\circ\text{C}$ 

| Parameter                       | Symbol | Conditions                                | Min | Typ | Max | Unit           |
|---------------------------------|--------|---|-----|-----|-----|----------------|
| Forward Voltage                 | $V_F$  | $I_F = 20\text{ mA}$                      |     |     | 1   | V              |
| Reverse Current                 | $I_R$  | $V_R = 30\text{ V}$                       |     |     | 50  | nA             |
| Diode capacitance               | $C_D$  | $f = 100\text{ MHz}, V_R = 0$             |     |     | 0.5 | pF             |
| Differential forward resistance | $r_f$  | $f = 100\text{ MHz}, I_F = 1.5\text{ mA}$ |     |     | 50  | $\Omega$       |
| Reverse impedance               | $z_r$  | $f = 100\text{ MHz}, V_R = 0$             | 5   |     |     | K $\Omega$     |
|                                 |        |   | 9   |     |     |                |
| Minority carrier lifetime       | $\tau$ | $I_F = 10\text{ mA}, I_R = 10\text{ mA}$  |     | 4   |     | $\mu\text{ S}$ |