

# BAP51-02

## General Purpose Pin Diodes 715mW

### Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Low diode capacitance
- Low diode forward resistance
- MARKING: A5

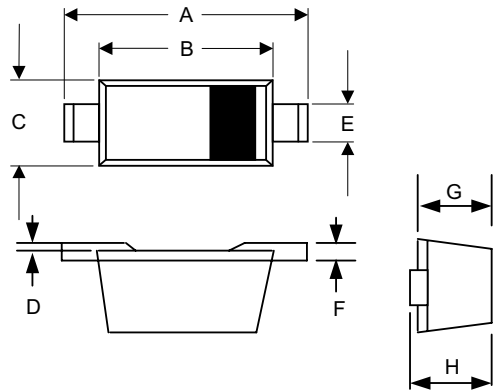
Maximum Ratings @ 25°C Unless Otherwise Specified

| Parameter                                    | Symbol         | Limits   | Unit |
|--|----------------|----------|------|
| Continuous Reverse Voltage                   | $V_R$          | 60       | V    |
| Forward Current                              | $I_F$          | 50       | mA   |
| Power Dissipation ( $T_A=90^\circ\text{C}$ ) | $P_D$          | 715      | mW   |
| Junction and Storage temperature             | $T_j, P_{stg}$ | -65~+150 | °C   |
| Thermal Resistance Junction to solder point  | $R_{thJs}$     | 85       | K/W  |

### Electrical Characteristics @ 25°C Unless Otherwise Specified

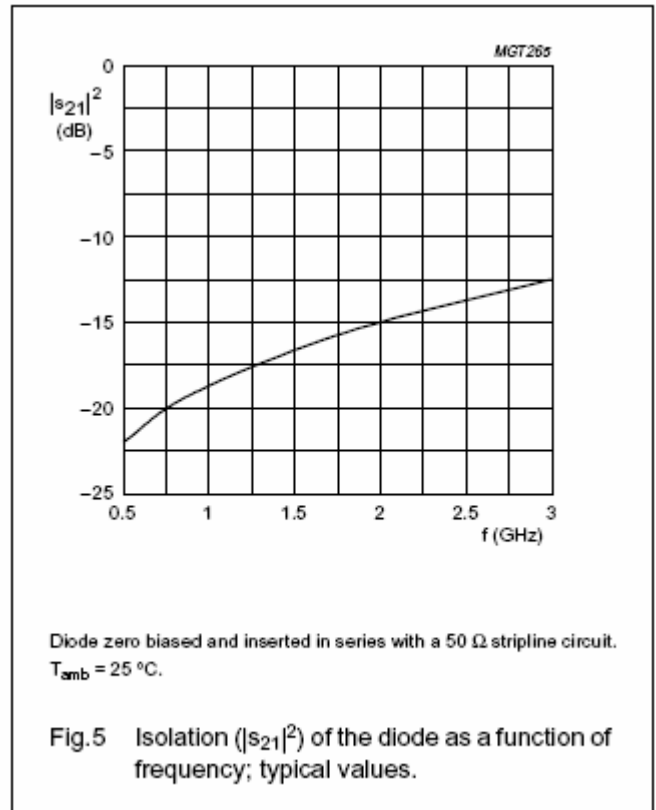
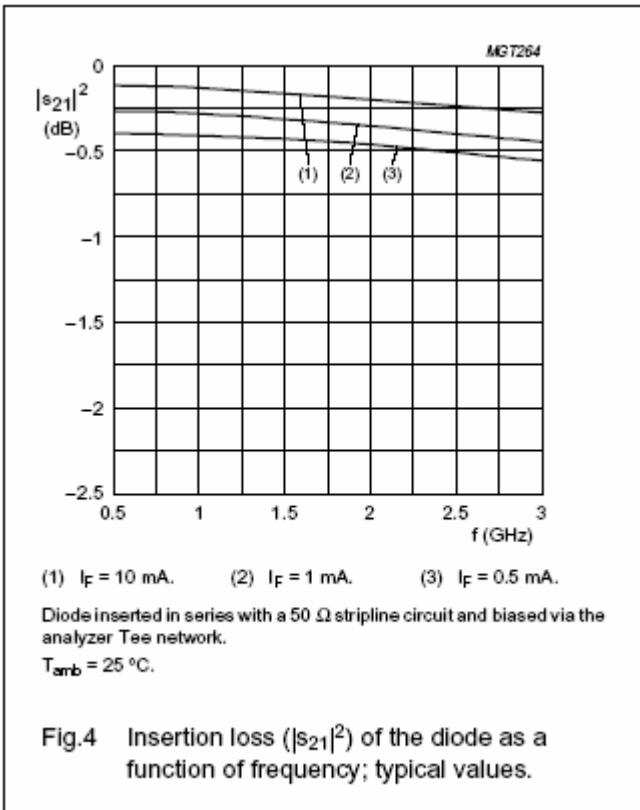
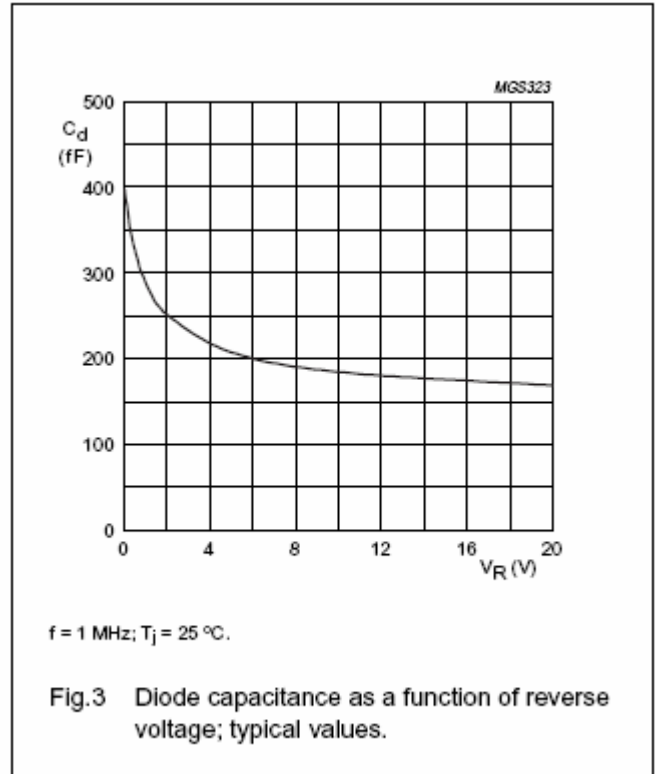
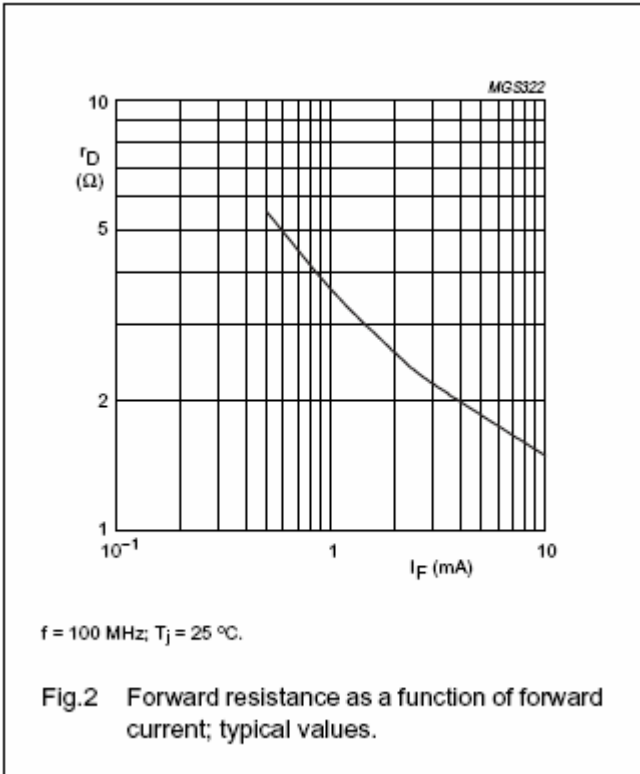
| Parameter                  | Symbol   | Min. | Max.     | Unit     | Conditions                          |
|----------------------------|----------|------|----------|----------|-------------------------------------|
| Continuous reverse voltage | $V_R$    | 50   |          | V        | $I_R=10\mu\text{A}$                 |
| Forward voltage            | $V_F$    |      | 1.1      | V        | $I_F=50\text{mA}$                   |
| Reverse current            | $I_R$    |      | 100      | nA       | $V_R=50\text{V}$                    |
| Diode capacitance          | $C_{d1}$ |      | 0.4(Typ) | pF       | $V_R=0\text{V}, f=1\text{MHz}$      |
|                            | $C_{d2}$ |      | 0.55     | pF       | $V_R=1\text{V}, f=1\text{MHz}$      |
|                            | $C_{d3}$ |      | 0.35     | pF       | $V_R=5\text{V}, f=1\text{MHz}$      |
| Diode forward resistance   | $r_D$    |      | 9        | $\Omega$ | $I_F=0.5\text{mA}, f=100\text{MHz}$ |
|                            | $r_D$    |      | 6.5      | $\Omega$ | $I_F=1\text{mA}, f=100\text{MHz}$   |
|                            | $r_D$    |      | 2.5      | $\Omega$ | $I_F=10\text{mA}, f=100\text{MHz}$  |

### SOD523



| DIM | DIMENSIONS |      |      |      | NOTE |
|-----|------------|------|------|------|------|
|     | INCHES     |      | MM   |      |      |
|     | MIN        | MAX  | MIN  | MAX  |      |
| A   | .059       | .067 | 1.50 | 1.70 |      |
| B   | .043       | .051 | 1.10 | 1.30 |      |
| C   | .030       | .033 | 0.75 | 0.85 |      |
| D   | .001       | .003 | 0.01 | 0.07 |      |
| E   | .010       | .014 | 0.25 | 0.35 |      |
| F   | .003       | .006 | 0.08 | 0.15 |      |
| G   | .020       | .028 | 0.50 | 0.70 |      |
| H   | .020       | .031 | 0.51 | 0.77 |      |

# Typical Characteristics





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## Ordering Information

| Device         | Packing              |
|----------------|----------------------|
| Part Number-TP | Tape&Reel;8Kpcs/Reel |

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Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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