

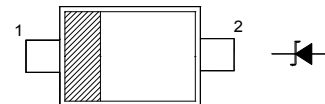
## SILICON PLANAR ZENER DIODES

### Features

- Standard Zener Breakdown Voltage : 5.6 V
- Steady State Power Rating of 200 mW

### PINNING

| PIN | DESCRIPTION |
|-----|-------------|
| 1   | Cathode     |
| 2   | Anode       |



Top View  
Simplified outline SOD-523 and symbol

### Absolute Maximum Ratings ( $T_a = 25\text{ }^{\circ}\text{C}$ )

| Parameter                              | Symbol         | Value         | Unit               |
|----------------------------------------|----------------|---------------|--------------------|
| Total Device Dissipaton                | $P_{tot}$      | 200           | mW                 |
| Junction and Storage Temperature Range | $T_j, T_{stg}$ | - 65 to + 150 | $^{\circ}\text{C}$ |

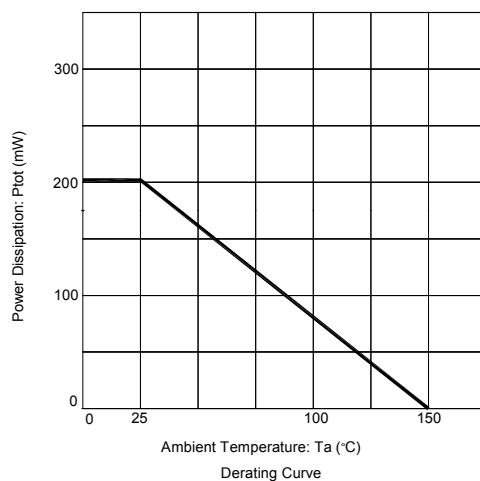
### Characteristics at $T_a = 25\text{ }^{\circ}\text{C}$

| Parameter                                  | Symbol | Max. | Unit |
|--------------------------------------------|--------|------|------|
| Forward Voltage<br>at $I_F = 10\text{ mA}$ | $V_F$  | 0.9  | V    |



| Type       | Marking Code | Zener Voltage <sup>1)</sup> |      |      |             | Zener Impedance |          |             | Leakage Current |          |
|------------|--------------|-----------------------------|------|------|-------------|-----------------|----------|-------------|-----------------|----------|
|            |              | $V_{ZT}$ (V)                |      |      | at $I_{ZT}$ | $Z_{ZT}$        | $Z_{ZK}$ | at $I_{ZK}$ | $I_R$           | at $V_R$ |
|            |              | Min.                        | Nom. | Max. | mA          | $\Omega$        | $\Omega$ | mA          | $\mu A$         | V        |
| BZX584C5V6 | I8           | 5.2                         | 5.6  | 6    | 5           | 40              | 200      | 1           | 1               | 2.5      |

<sup>1)</sup> Tested with pulses  $t_p = 20$  ms.

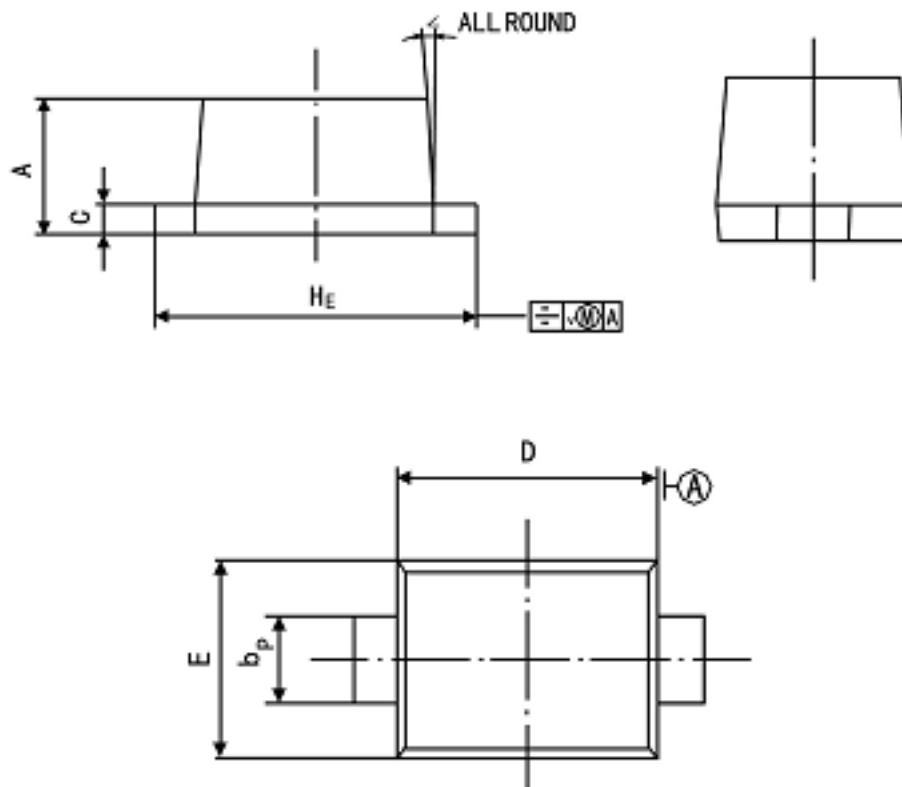




**PACKAGE OUTLINE**

Plastic surface mounted package; 2 leads

**SOD-523**



| Symbol | Dimension in Millimeters |      |
|--------|--------------------------|------|
|        | Min                      | Max  |
| A      | 0.60                     | 0.70 |
| bp     | 0.30                     | 0.40 |
| C      | 0.100                    | 0.14 |
| D      | 1.15                     | 1.25 |
| E      | 0.75                     | 0.85 |
| HE     | 1.50                     | 1.70 |
| V      | —                        | 0.10 |
| ∠      | —                        | 5°   |