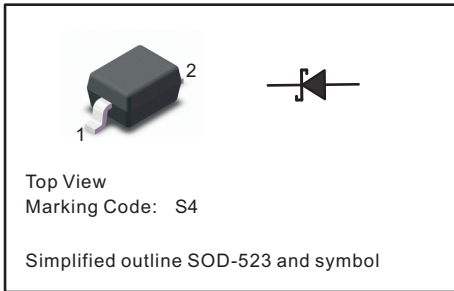


**SCHOTTKY BARRIER RECTIFIERS**
**PINNING**

PIN	DESCRIPTION
1	Cathode
2	Anode


**FEATURES**

- ◆ Metal silicon junction, majority carrier conduction
- ◆ Guarding for overvoltage protection
- ◆ Low power loss, high efficiency
- ◆ High current capability
- ◆ low forward voltage drop
- ◆ High surge capability
- ◆ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

**MECHANICAL DATA**

- ◆ Case: SOD-523
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026

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

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	40	V
Reverse Voltage	$V_R$	40	V
Average Forward Rectified Current	$I_{F(AV)}$	350	mA
Non-Repetitive Peak Forward Surge Current at $t = 1\text{ s}$	$I_{FSM}$	2	A
Power Dissipation	$P_{tot}$	200	mW
Operating and Storage Temperature Range	$T_j, T_{stg}$	- 65 to + 125	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 10\text{ }\mu\text{A}$	$V_{(BR)R}$	40	-	-	V
Reverse Leakage Current at $V_R = 30\text{ V}$	$I_R$	-	-	5	$\mu\text{A}$
Forward Voltage at $I_F = 20\text{ mA}$ at $I_F = 200\text{ mA}$	$V_F$	-	-	0.37 0.6	V
Total Capacitance at $V_R = 0\text{ V}, f = 1\text{ MHz}$	$C_T$	-	50	-	pF
Reverse Recovery Time at $I_F = I_R = 200\text{ mA}, I_{rr} = 0.1 I_R, R_L = 100\text{ }\Omega$	$t_{rr}$	-	10	-	ns

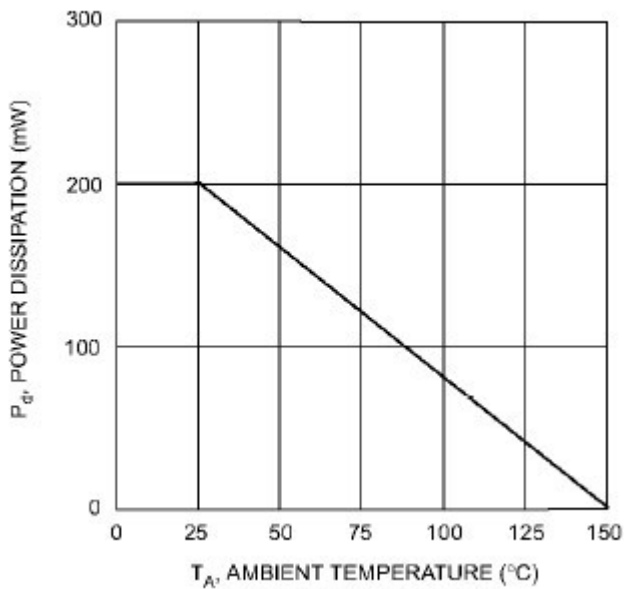


Fig. 1 Power Derating Curve

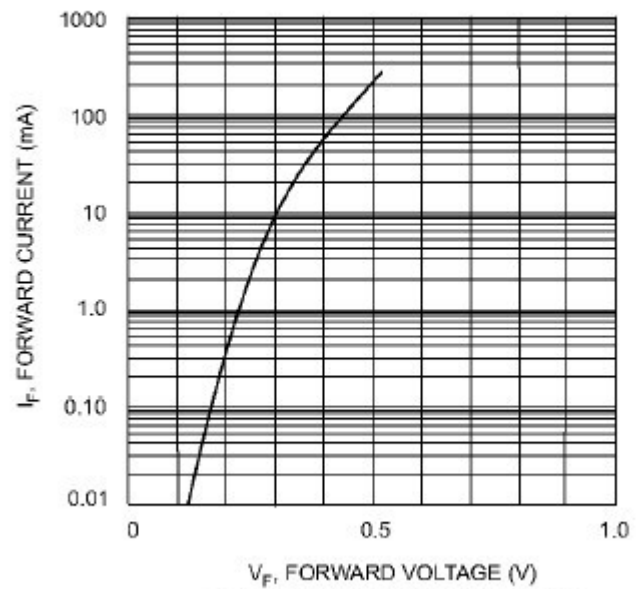


Fig. 2 Typical Forward Characteristics

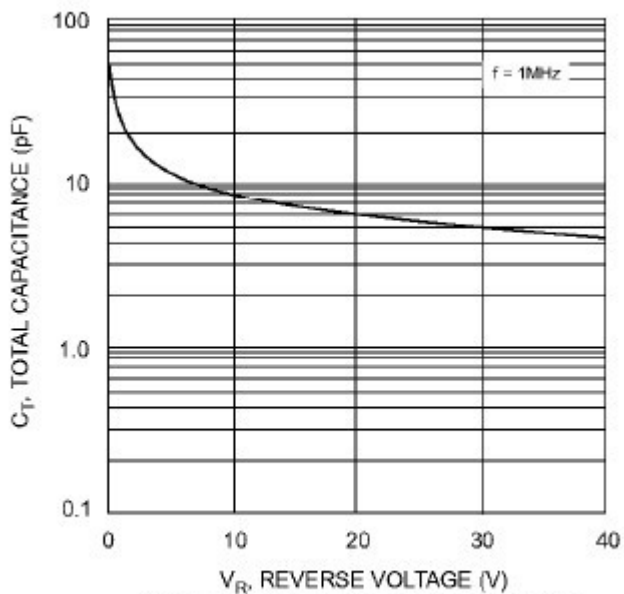
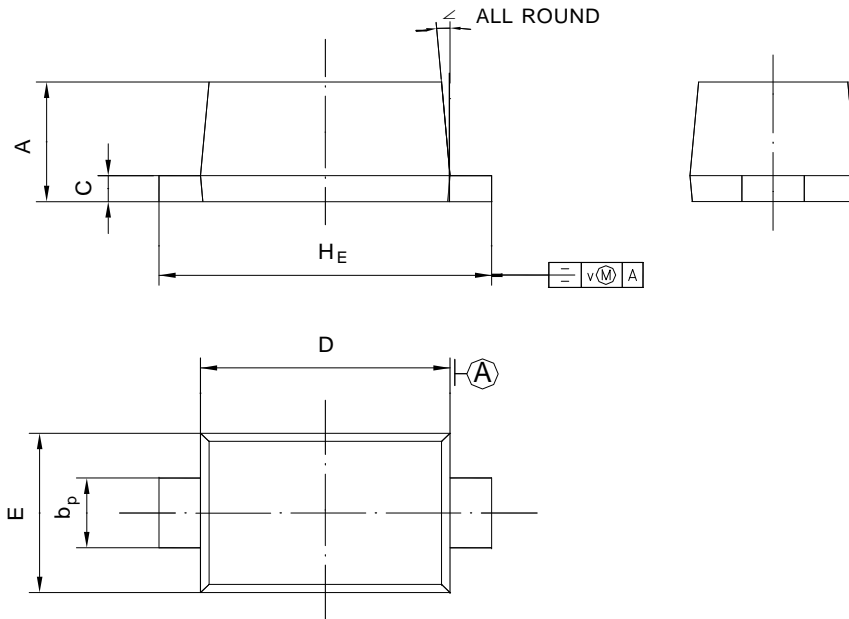


Fig. 3 Total Capacitance vs Reverse Voltage

**PACKAGE OUTLINE**

Plastic surface mounted package; 2 leads



UNIT	A	b <sub>p</sub>	C	D	E	H <sub>E</sub>	V	∠
mm	0.70 0.60	0.4 0.3	0.135 0.100	1.25 1.15	0.85 0.75	1.7 1.5	0.1	5°