

RB751S-40

Silicon Epitaxial Planar Schottky Barrier Diode

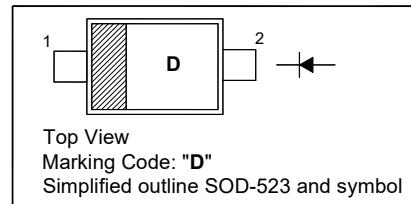
for high speed switching and detection applications

Features

- Small surface mounting type
- Low reverse current and low forward voltage
- High reliability

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

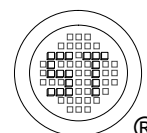


Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	40	V
Reverse Voltage	V_R	30	V
Average Forward Rectifying Current	$I_{F(AV)}$	30	mA
Peak Forward Surge Current (8.3 ms)	I_{FSM}	200	mA
Junction Temperature Range	T_j	- 55 to + 125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 125	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 10 \mu\text{A}$	$V_{(BR)R}$	30	-	-	V
Forward Voltage at $I_F = 1 \text{ mA}$	V_F	-	-	0.37	V
Reverse Current at $V_R = 30 \text{ V}$	I_R	-	-	0.5	μA
Capacitance Between Terminals at $V_R = 1 \text{ V}$, $f = 1 \text{ MHz}$	C_T	-	2	-	pF



Electrical Characteristics Curves

Fig 1. C_t vs Reverse Voltage

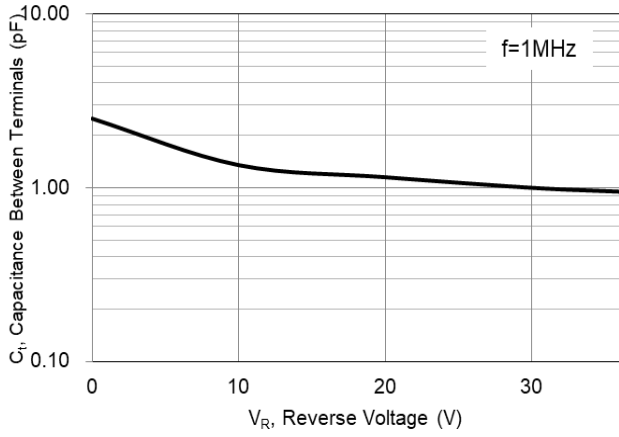


Fig 2. I_{FSM} vs time

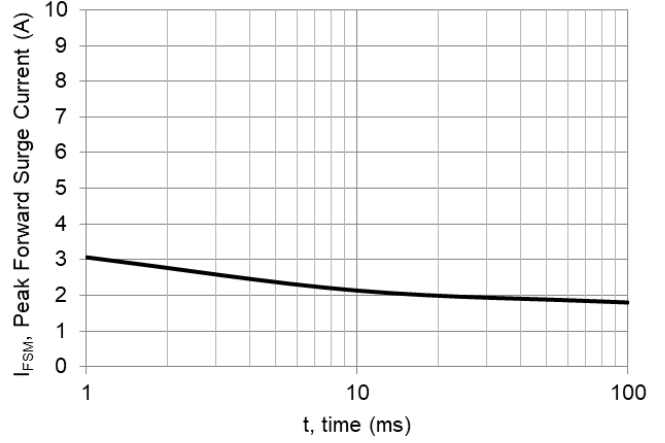


Fig 3. Reverse Voltage vs Reverse Current

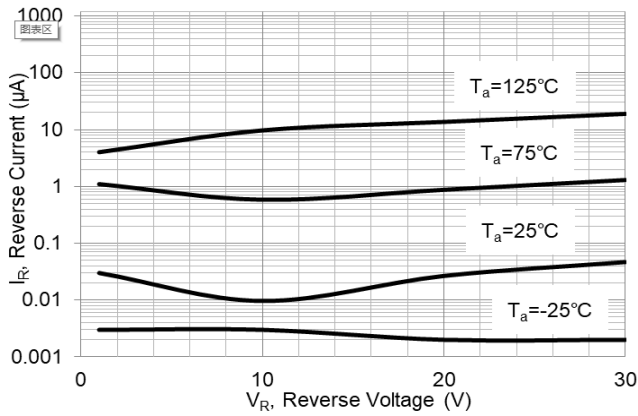
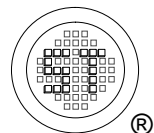
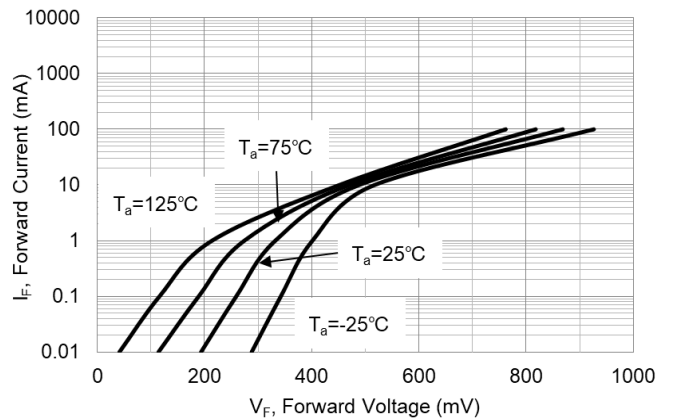


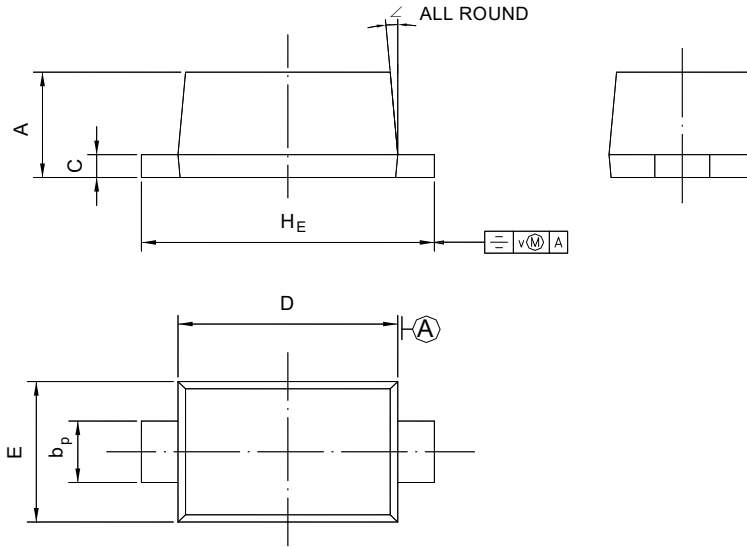
Fig 4. Forward Voltage vs Forward Current



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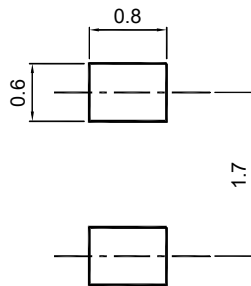
PACKAGE OUTLINE Plastic surface mounted package; 2 leads

SOD-523



UNIT	A	b _p	C	D	E	H _E	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°

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	(inch)	mm	(inch)	
SOD-523	8	4 ± 0.1	0.157 ± 0.004	178	7	4,000

Marking information

" D " = Part No
 " III " = Cathode line
 Font type: Arial

