



Small Outline Flat Lead Plastic Schottky Barrier Diode

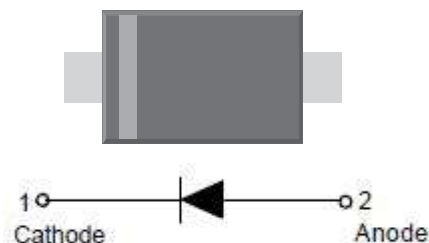
PRIMARY CHARACTERISTICS

V_{RM}	40V
V_R	40V
I_O	30mA
$V_F (Max)$	0.37V
$T_J (Max)$	125°C

SCHEMATIC DIAGRAM

SOD-523 PACKAGE

MARKING : 5 or 4B



FEATURES

- Small surface mounting type
- Low reverse current and low forward voltage
- High reliability
- Moisture Sensitivity Level 1

MECHANICAL DATA

- Case : Molded plastic, SOD-523
- Polarity : Shown above
- Terminals : Plated terminals, solderable per MIL-STD-750, Method 2026
- Epoxy : UL94-V0 rated flame retardant

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

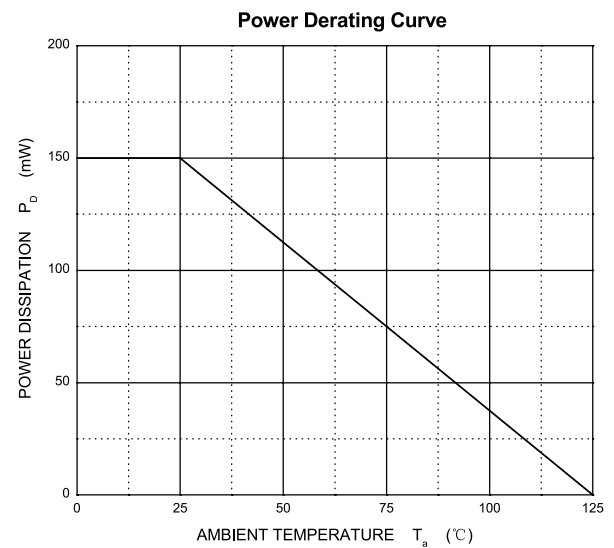
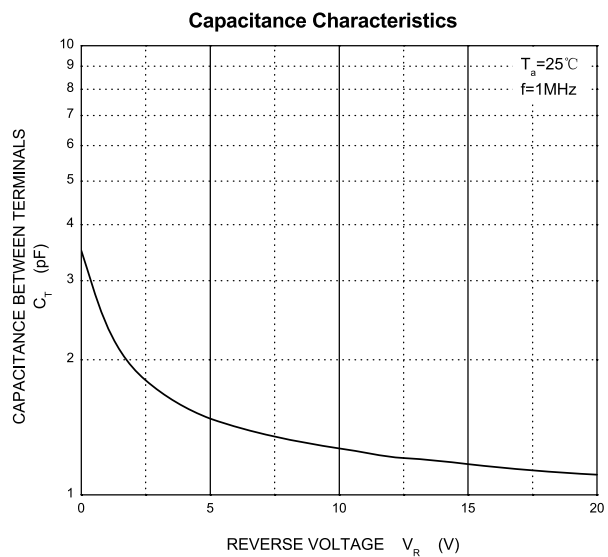
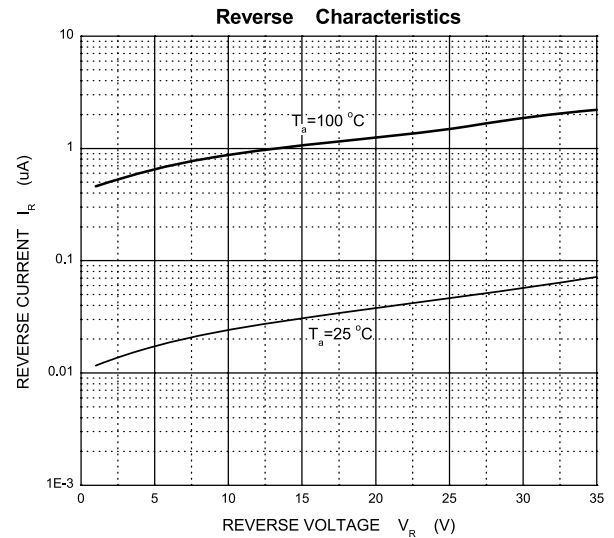
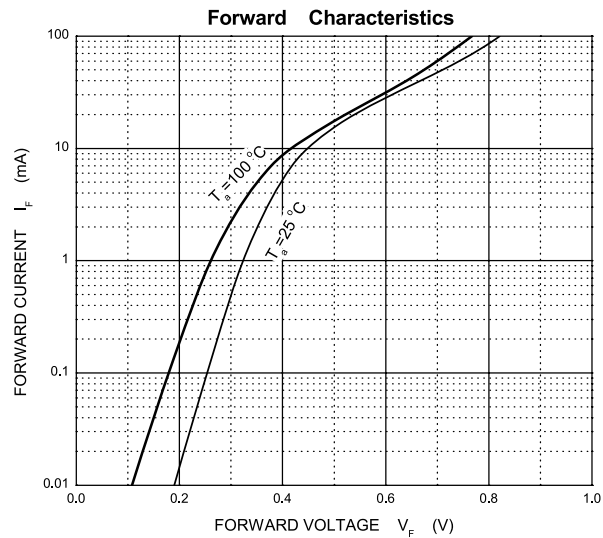
Parameter	Symbol	Limit	Unit
Peak reverse voltage	V_{RM}	40	V
DC reverse voltage	V_R	40	V
Mean rectifying current	I_O	30	mA
Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	I_{FSM}	200	mA
Power dissipation	P_D	150	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	667	°C/W
Operating Junction Temperature Range	T_J	-40 ~ +125	°C
Storage Temperature Range	T_{stg}	-55 ~ +150	°C

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

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse voltage	$V_{(BR)}$	40			V	$I_R=1\text{mA}$
Forward voltage	V_F	0.2		0.37	V	$I_F=1\text{mA}$
Reverse current	I_R	0.01		0.5	μA	$V_R=30\text{V}$
Capacitance between terminals	C_T	0.5	2	10	pF	$V_R=1\text{V}, f=1\text{MHz}$



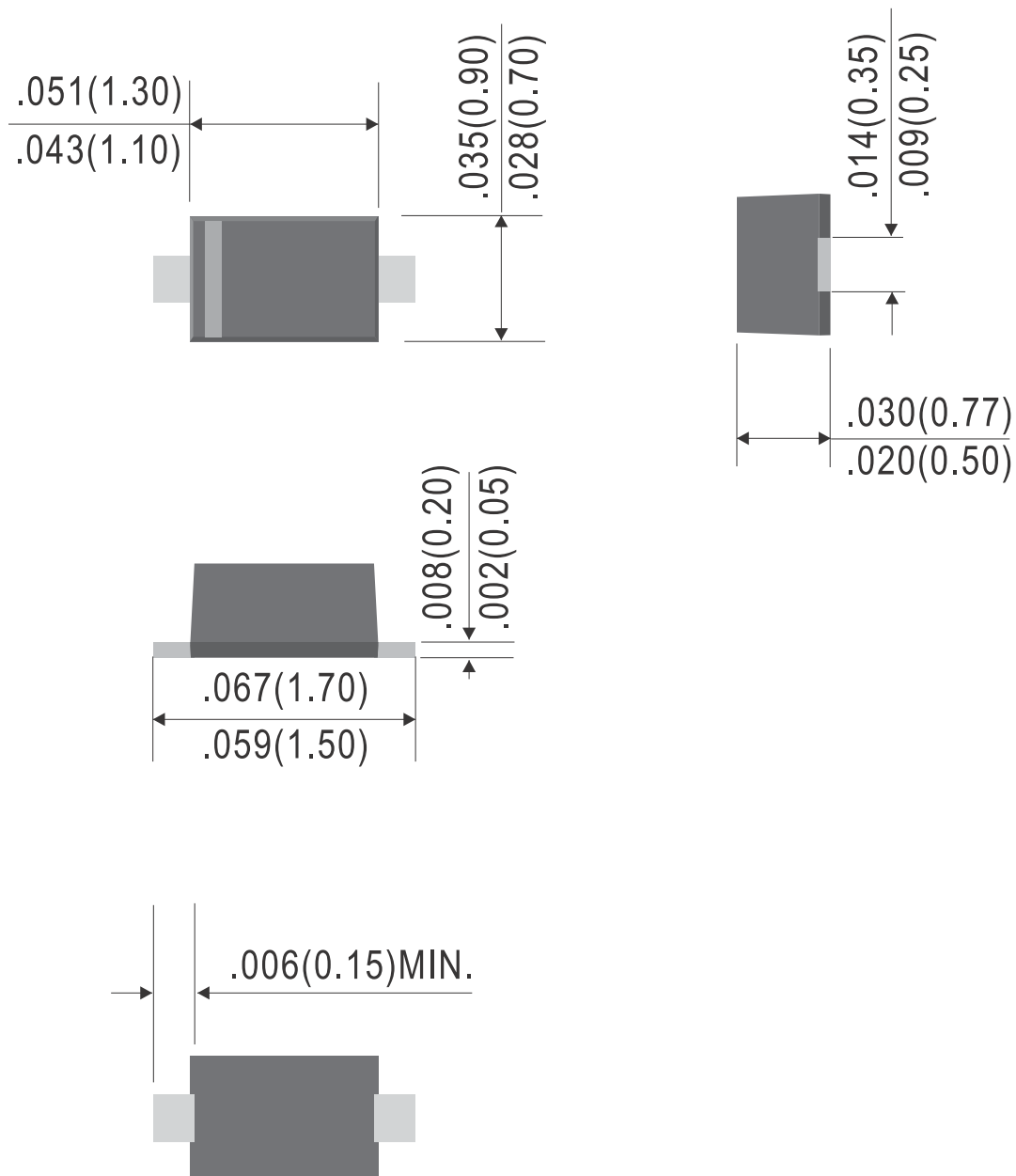
Typical Performance Characteristics





Outline Drawing

SOD-523

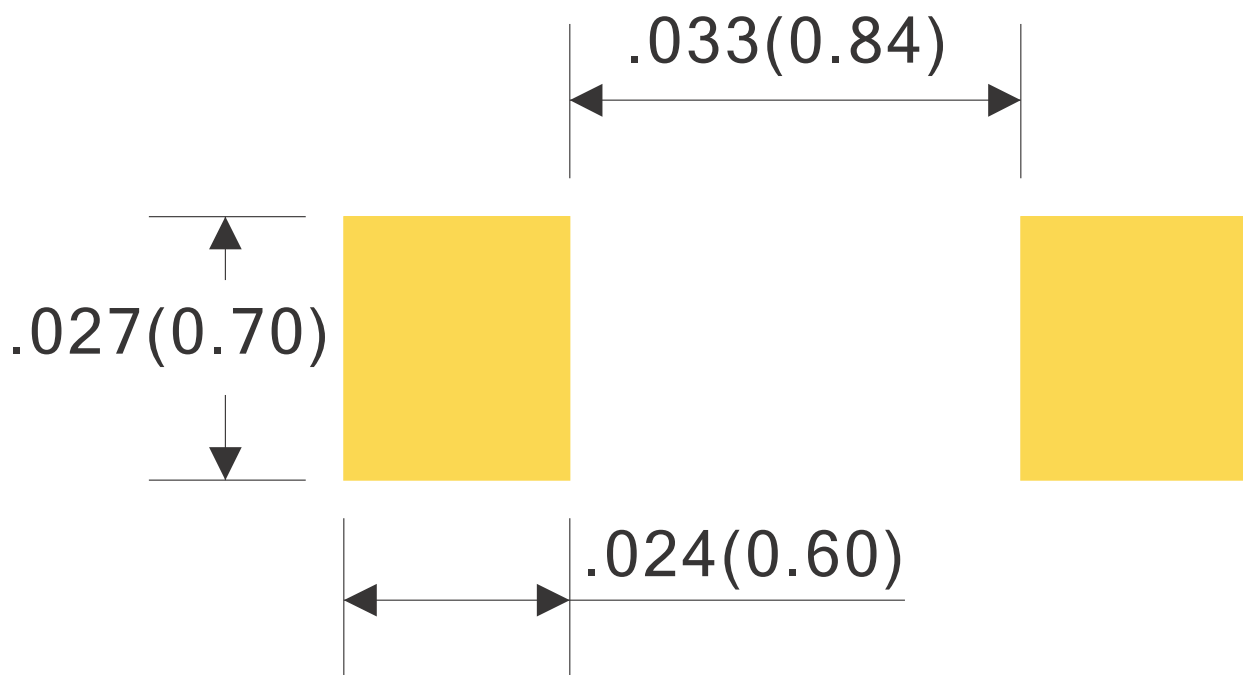


Rev.D



Suggested Soldering Pad Layout

SOD-523



Dimensions in inches and (millimeters)

RevA



Ordering Information:

Device PN	Marking ⁽⁴⁾	Packing
SCS751S -T ⁽¹⁾ H ⁽²⁾ -WS ⁽³⁾	5 / 4B	Tape&Reel: 8 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) Packing code suffix "G" for RoHS product : Packing code Suffix "H" for halogen free product.
All materials and products supplied comply with the U.S. Toxic Substances Control Act statement, PBT Chemicals.

(3) Willas brand abbreviation, Label Type does not display

(4) There may be additional marking, which relates to the lot trace code information (data code and vendor code), the logo or the environmental category on the device

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