

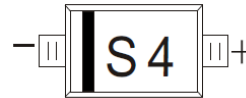
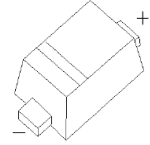
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PRIMARY CHARACTERISTICS

V_R	10V
I_o	100mA
$V_F@I_F=5mA$	0.3V
$T_{J,Max}$	125°C

SOD-523 PACKAGE

MARKING: S4



FEATURES

- High Speed
- High Reliability
- Small Package
- Low Forward Voltage
- 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

MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

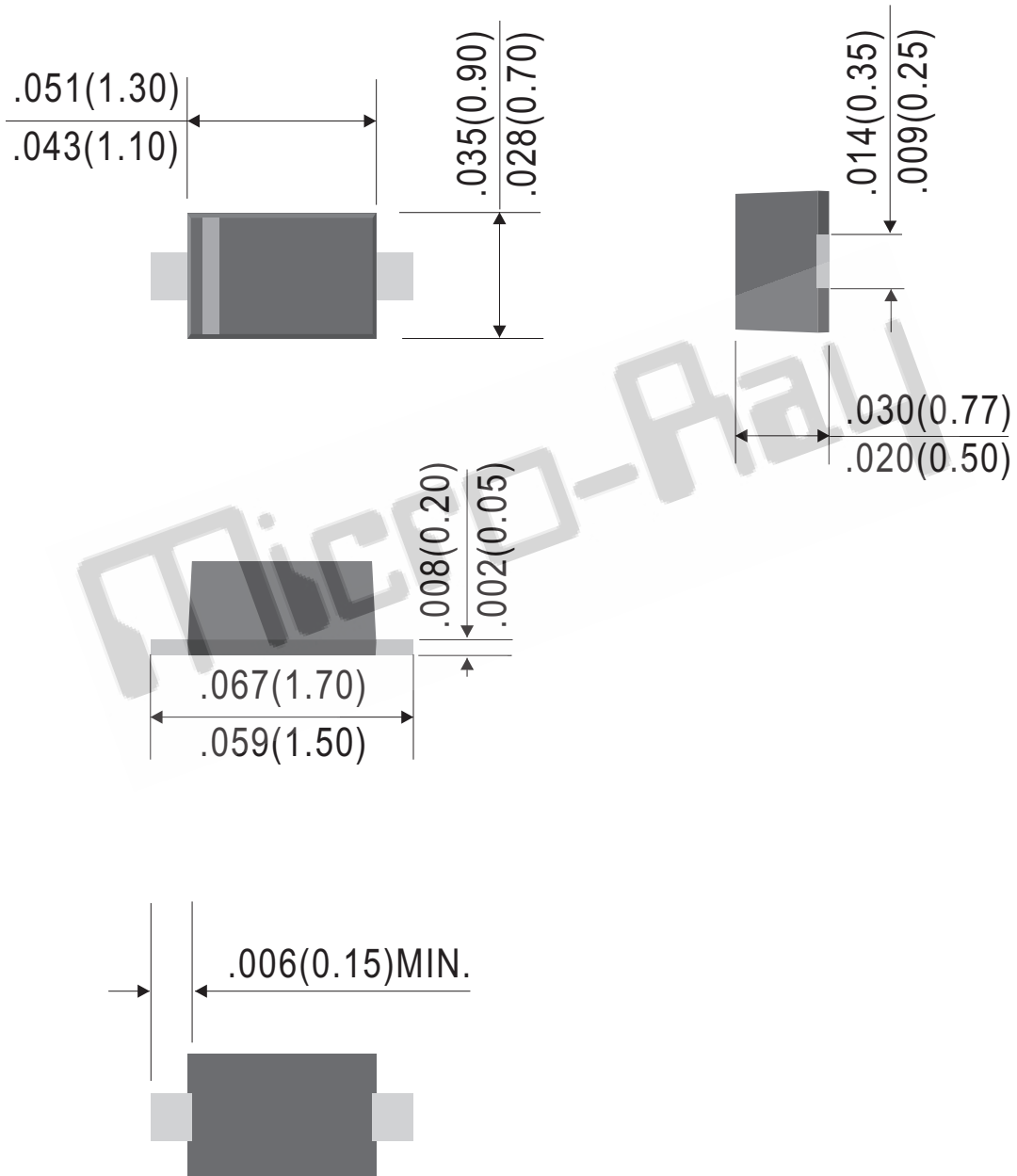
Symbol	Parameter	Value	Unit
V_R	DC Blocking Voltage	10	V
I_o	Continuous Forward Current	100	mA
I_{FM}	Peak Forward Current	200	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current @ $t=8.3ms$	1	A
P_D	Power Dissipation	150	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	667	$^\circ\text{C}/\text{W}$
T_j	Junction Temperature	125	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55~+150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS($T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	10			V
Reverse current	I_R	$V_R=10\text{V}$			20	μA
Forward voltage	V_F	$I_F=1\text{mA}$		0.18		V
		$I_F=5\text{mA}$			0.3	
		$I_F=100\text{mA}$			0.5	
Total capacitance	C_{tot}	$V_R=0\text{V}, f=1\text{MHz}$			40	pF

Outline Drawing

SOD-523

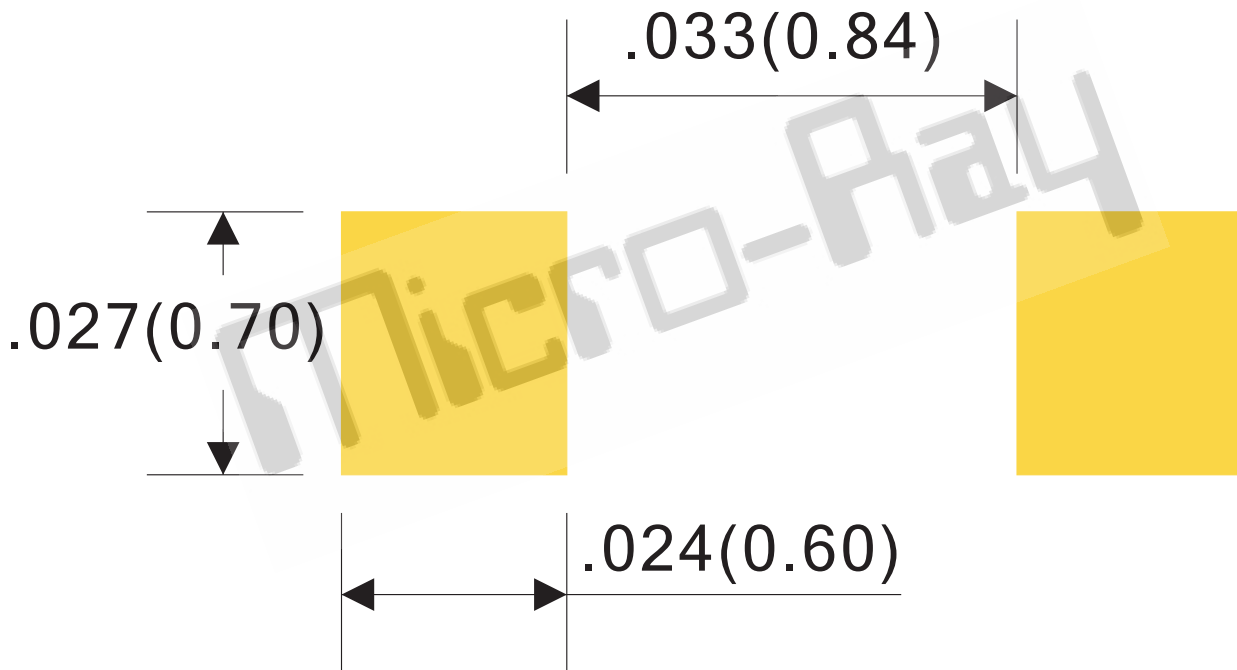


Dimensions in inches and (millimeters)

Rev.D

Suggested Soldering Pad Layout

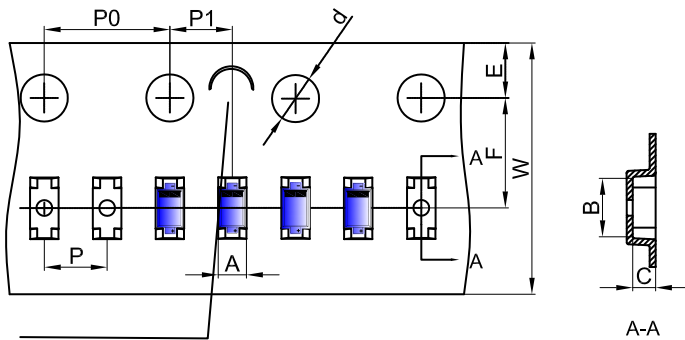
SOD-523



Dimensions in inches and (millimeters)

RevA

SOD-523 Embossed Carrier Tape

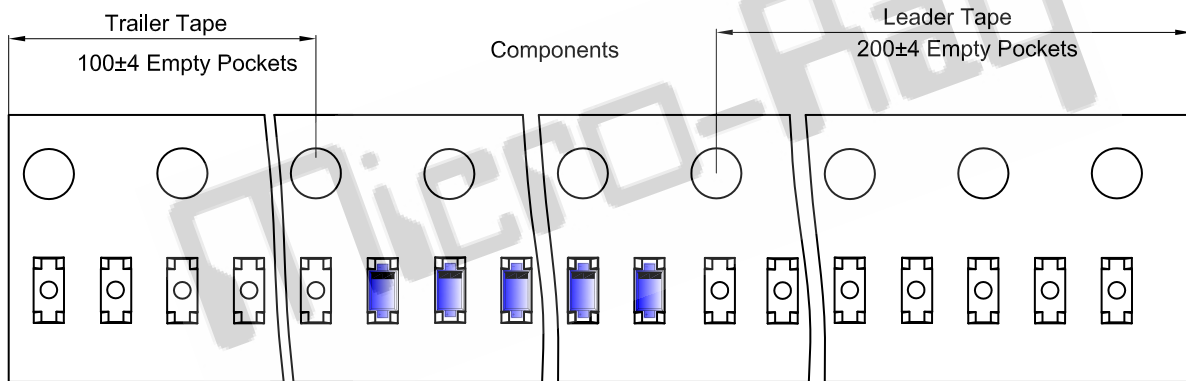


NOTE: TO CAVE 'C' ON CARRIER TAPE PER 120MM

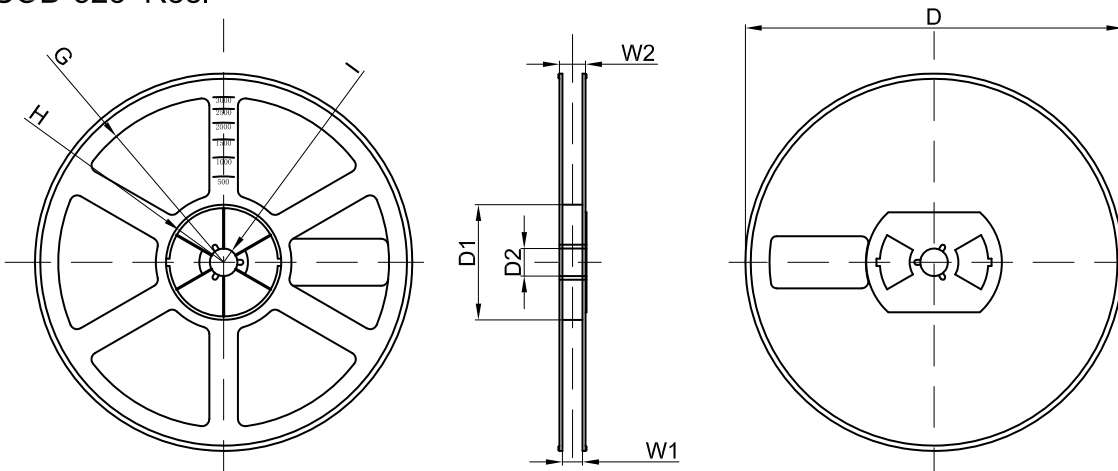
Packaging Description:
SOD-523 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 8,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOD-523	0.9	1.94	0.73	Ø1.50	1.75	3.50	4.00	2.00	2.00	8.00

SOD-523 Tape Leader and Trailer



SOD-523 Reel



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

Ordering Information:

Device PN	Packing
∞ -T ⁽¹⁾ G ⁽²⁾ -WS ⁽³⁾	Tape&Reel: Kpcs/Reel

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

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

(3) WS : Micro-Ray brand abbreviation, Label Type does not display

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