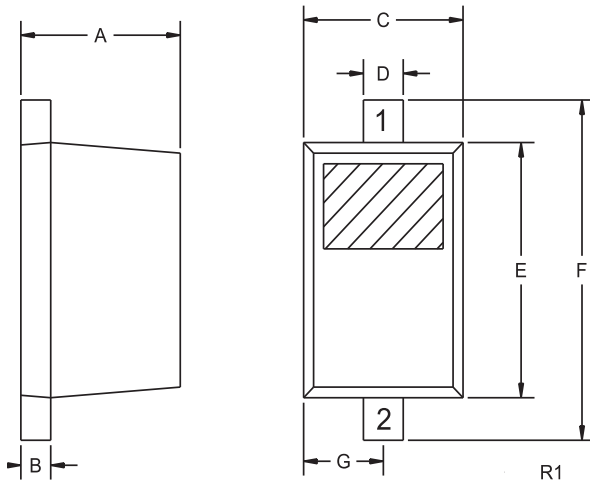


**Package Details**  
SOD-523 Case



**Mechanical Drawing**



SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.020	0.031	0.50	0.80
B	0.004	0.008	0.10	0.20
C	0.028	0.035	0.70	0.90
D	0.008	0.011	0.20	0.28
E	0.039	0.055	1.00	1.40
F	0.055	0.071	1.40	1.80
G	0.016		0.40	

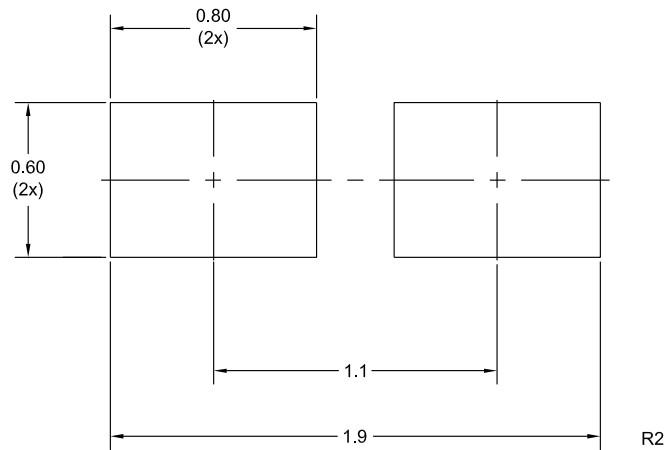
SOD-523 (REV: R1)

**Lead Code:**

- 1) Cathode
- 2) Anode

**Part Marking:** 2-3 Character Alpha/Numeric Code

**Mounting Pad Geometry** (Dimensions in mm)



R4 (4-March 2010)

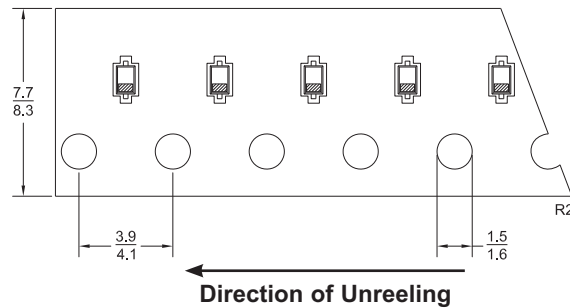
# Package Details

## SOD-523 Case



### Tape Dimensions and Orientation (Dimensions in mm)

Tape Width: 8mm



\* Devices are taped in accordance with Electronic Industries Association Standard EIA-481-1-A

### Packaging Base

7" Reel = 3,000 pcs.

### Reel Labeling Information

Each reel is labeled with the following information:

Central Part Number, Customer Part Number, Purchase Order Number, Quantity, Lot Number, Date Code, Ship Date and Marking Code.

### Reel Packing Information


Reel Size	Reels per Box (Maximum)	Parts per Box (Maximum)	Box Dimensions		Shipping Weight (Max.)	
			INCH	CM	LB	KG
7"	9	27,000	9x9x5	23x23x13	3	2
	18	54,000	9x9x9	23x23x23	5	3
	40	120,000	21x9x9	53x23x23	11	5
	108	324,000	27x9x17	69x23x43	30	14

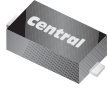
### Ordering Information

- For devices taped and reeled on 7" reels, add TR suffix to part number.
- All SMDs are available in small quantities for prototype and manual placement applications.

R4 (4-March 2010)

# Material Composition Specification

SOD-523 Case  
Pb (lead)-free plating\*\* 



Device average mass . . . . . 1.37 mg

Fluctuation margin . . . . . +/-10%

Component	Material	Material		Substance	CAS No.	Substance		
		(%wt)	(mg)			(%wt)	(mg)	(ppm)
active device	doped Si	5.11%	0.07	Si	7440-21-3	5.11%	0.07	51,095
bond wire	gold	0.44%	0.01	Au	7440-57-5	0.44%	0.006	4,380
leadframe	alloy 42 w/ silver plating	32.26%	0.44	Fe	7439-89-6	18.69%	0.256	186,861
				Ni	7440-02-0	12.99%	0.178	129,927
				Ag	7440-22-4	0.58%	0.008	5,839
encapsulation*	EMC	60.74%	0.83	silica	7631-86-9	43.8%	0.6	437,956
				epoxy resin	Proprietary	15.26%	0.209	152,555
				Sb <sub>2</sub> O <sub>3</sub>	1309-64-4	1.24%	0.017	12,409
				TBBA	79-94-7	0.29%	0.004	2,920
				carbon	1333-86-4	0.15%	0.002	1,460
	EMC GREEN	60.74%	0.83	silica	60676-86-0	40.59%	0.556	405,915
				epoxy resin	29690-82-2	9.22%	0.126	92,196
				phenol resin	9003-35-4	4.63%	0.063	46,255
				carbon black	1333-86-4	0.31%	0.004	3,147
				metal hydroxide	1309-42-8	5.98%	0.082	59,786
plating**	tin lead process	1.46%	0.02	Sn	7440-31-5	1.17%	0.016	11,679
				Pb	7439-92-1	0.29%	0.004	2,920
	100% matte tin	1.46%	0.02	Sn	7440-31-5	1.46%	0.02	14,599

\*EMC GREEN molding compound is Halogen-Free.

\*\*Specify Lead-Free when ordering 100% tin (Pb-free) plating.

Disclaimer

The information provided in this Material Composition data sheet is, to the best of our knowledge, correct. However, there is no guarantee to completeness or accuracy, as some information is derived from data sources outside the company.

R5 (9-March 2010)