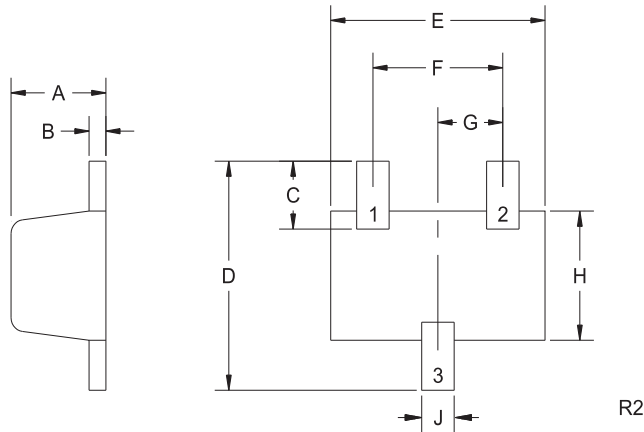


**Package Details**  
SOT-523 Case



**Mechanical Drawing**

BOTTOM VIEW



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.023	0.031	0.58	0.78
B	0.002	0.008	0.04	0.20
C	0.013	0.021	0.34	0.54
D	0.059	0.067	1.50	1.70
E	0.059	0.067	1.50	1.70
F	0.035	0.043	0.90	1.10
G	0.020		0.50	
H	0.031	0.039	0.78	0.98
J	0.010	0.014	0.25	0.35

SOT-523 (REV: R2)

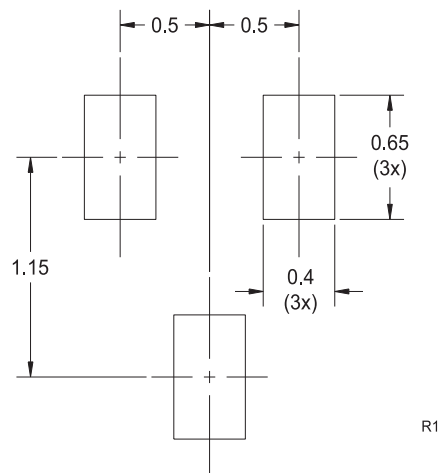
R2

**Lead Code:**

Reference individual device datasheet.

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

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



R1

R3 (4-March 2010)

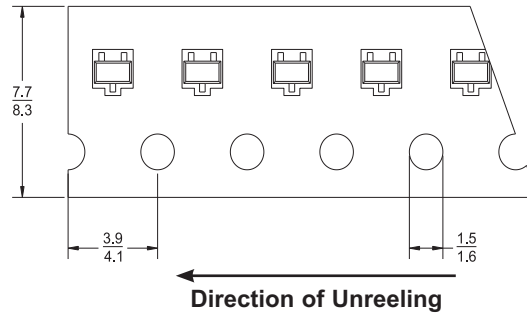
# Package Details

## SOT-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	6	3
	40	120,000	21x9x9	53x23x23	13	6
	108	324,000	27x9x17	69x23x43	34	16

### 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.

R3 (4-March 2010)

# Material Composition Specification

## SOT-523 Case



Device average mass . . . . . **2.6 mg**  
 Fluctuation margin . . . . . **+/-10%**

Component	Material	Material		Substance	CAS No.	Substance		
		(%wt)	(mg)			(%wt)	(mg)	(ppm)
active device	doped Si	2.73%	0.07	Si	7440-21-3	2.73%	0.071	27,250
bond wire	gold or copper	0.35%	0.01	Au	7440-57-5	0.35%	0.009	3,540
				Cu	7440-50-8			
leadframe	Cu alloy w/ Ni + Ag plating	35.29%	0.92	Cu	7440-50-8	30.75%	0.8	307,540
				Ni	7440-02-0	3.12%	0.081	31,240
				Sn	7440-31-5	0.82%	0.021	8,240
				Ag	7440-22-4	0.58%	0.015	5,840
encapsulation*	EMC	59.03%	1.54	silica	7631-86-9	42.56%	1.107	425,640
				epoxy resin	Proprietary	14.83%	0.386	148,310
				Sb <sub>2</sub> O <sub>3</sub>	1309-64-4	1.18%	0.031	11,800
				TBBA	79-94-7	0.3%	0.008	3,000
	EMC GREEN	59.03%	1.54	silica	7631-86-9	43.65%	1.136	436,587
				epoxy resin	Proprietary	15.21%	0.396	152,124
				carbon	1333-86-4	0.15%	0.004	1,539
plating**	tin/lead process	2.61%	0.07	Sn	7440-31-5	2.22%	0.058	22,185
				Pb	7439-92-1	0.39%	0.01	3,915
	matte tin	2.61%	0.07	Sn	7440-31-5	2.61%	0.068	26,100

\*EMC GREEN molding compound is Halogen-Free.

\*\*For Lead Free plating, add suffix "PB FREE" to part number.

For Tin/Lead plating, add suffix "TIN/LEAD" to part number.

No suffix designation allows for the supply of either lead-free or tin/lead plated product depending on availability.

### 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.

R8 (16-July 2018)