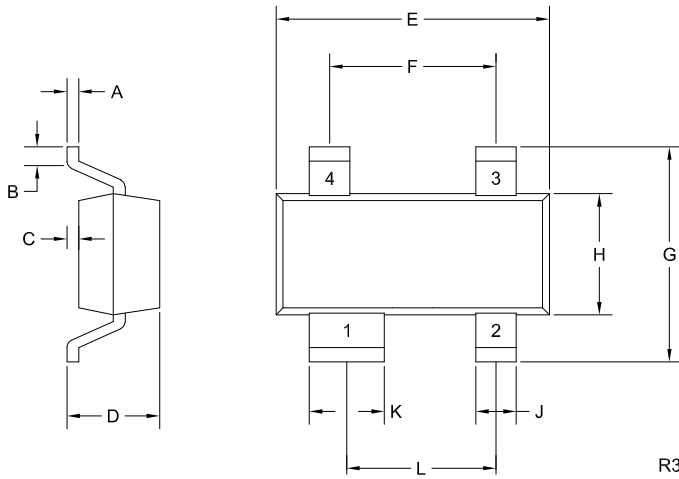


# Package Details

## SOT-143 Case



### Mechanical Drawing



SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.003	0.008	0.08	0.20
B	0.006	-	0.15	-
C	0.000	0.005	0.01	0.13
D	0.035	0.045	0.89	1.14
E	0.110	0.120	2.79	3.04
F	0.075		1.90	
G	0.083	0.102	2.10	2.60
H	0.047	0.055	1.19	1.40
J	0.012	0.020	0.30	0.50
K	0.030	0.037	0.76	0.93
L	0.067		1.70	

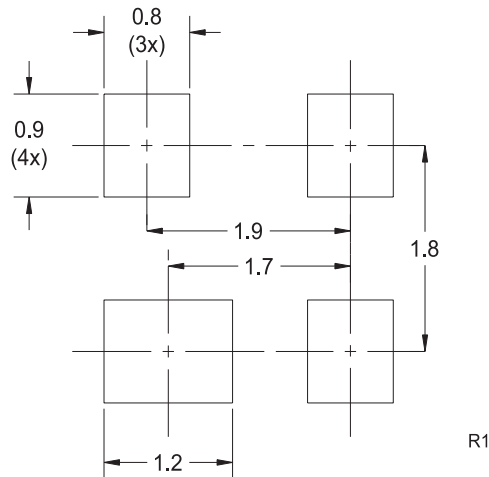
SOT-143 (REV: R3)

R3

**Lead Code:**  
Reference individual device datasheet.

**Part Marking:** 2-4 Character Alpha/Numeric Code

### Mounting Pad Geometry (Dimensions in mm)



R1

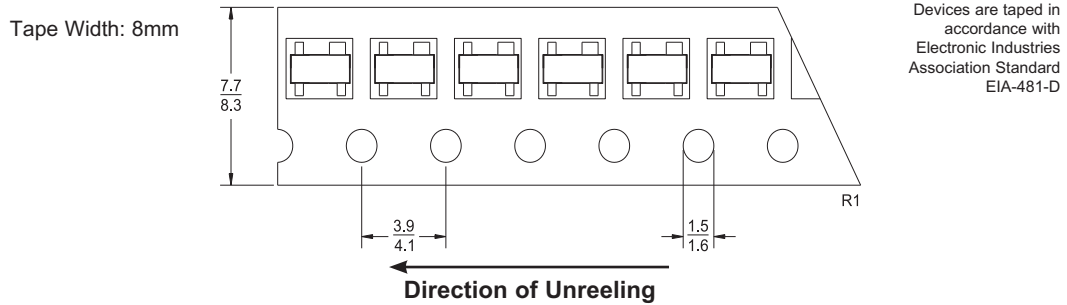
R4 (19-September 2018)

# Package Details

## SOT-143 Case



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



### 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	4	2
	18	54,000	9x9x9	23x23x23	7	4
	40	120,000	21x9x9	53x23x23	14	7
	108	324,000	27x9x17	69x23x43	39	18

### 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 (19-September 2018)

# Material Composition Specification

## SOT-143 Case



Device average mass . . . . . 9.5 mg  
 Fluctuation margin . . . . . +/-10%

Component	Material	Material		Substance	CAS No.	Substance		
		(%wt)	(mg)			(%wt)	(mg)	(ppm)
active device	doped Si	3.47%	0.33	Si	7440-21-3	3.47%	0.33	34,737
bond wire	gold	0.14%	0.013	Au	7440-57-5	0.14%	0.013	1,368
leadframe	Cu alloy w/ silver plating	27.06%	2.57	Cu	7440-50-8	26.32%	2.5	263,158
				Fe	7439-89-6	0.63%	0.06	6,316
				Zn	7440-66-6	0.09%	0.009	947
				Ag	7440-22-4	0.02%	0.002	211
die attach	silver epoxy	0.06%	0.006	epoxy resin	Proprietary	0.01%	0.001	105
				Ag	7440-22-4	0.05%	0.005	526
encapsulation*	EMC	68.63%	6.52	silica	7631-86-9	55.16%	5.24	551,579
				epoxy resin	29690-82-2	8.21%	0.78	82,105
				phenol resin	9003-35-4	4.11%	0.39	41,053
				Sb <sub>2</sub> O <sub>3</sub>	1309-64-4	0.58%	0.055	5,789
				Br	7726-95-6	0.58%	0.055	5,789
	EMC GREEN	68.63%	6.52	silica	7631-86-9	52.84%	5.02	528,421
				epoxy resin	29690-82-2	6.74%	0.64	67,368
				phenol resin	9003-35-4	6.74%	0.64	67,368
				carbon black	1333-86-4	0.21%	0.02	2,105
				metal hydroxide	1309-42-8	2.11%	0.2	21,053
plating**	tin/lead process	0.63%	0.06	Sn	7440-31-5	0.51%	0.048	5,053
				Pb	7439-92-1	0.13%	0.012	1,263
	matte tin	0.63%	0.06	Sn	7440-31-5	0.63%	0.06	6,316

\*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.

R5 (16-July 2018)