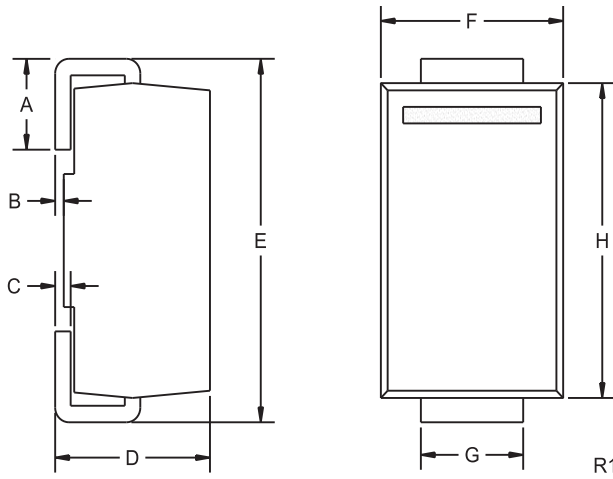


**Package Details**  
SMA Case



**Mechanical Drawing**



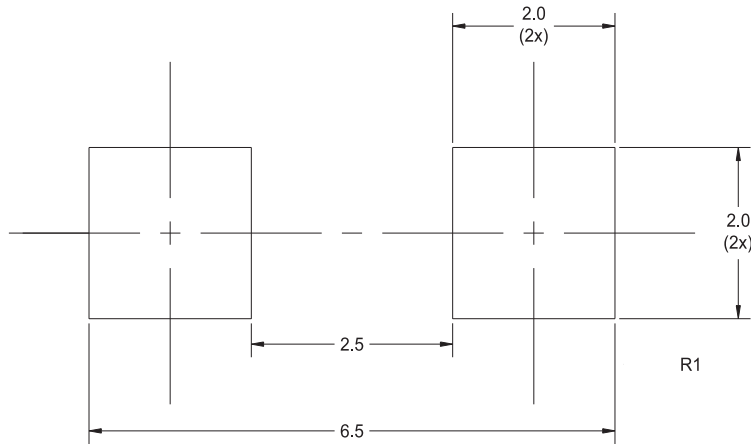
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.030	0.060	0.76	1.52
B	0.004	0.008	0.10	0.20
C	0.006	0.012	0.15	0.30
D	0.078	0.103	1.98	2.62
E	0.188	0.220	4.78	5.59
F	0.090	0.115	2.29	2.92
G	0.050	0.070	1.27	1.78
H	0.157	0.181	3.99	4.60

SMA (REV: R1)

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

**Part Marking:** 4-6 Character Alpha/Numeric Code

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



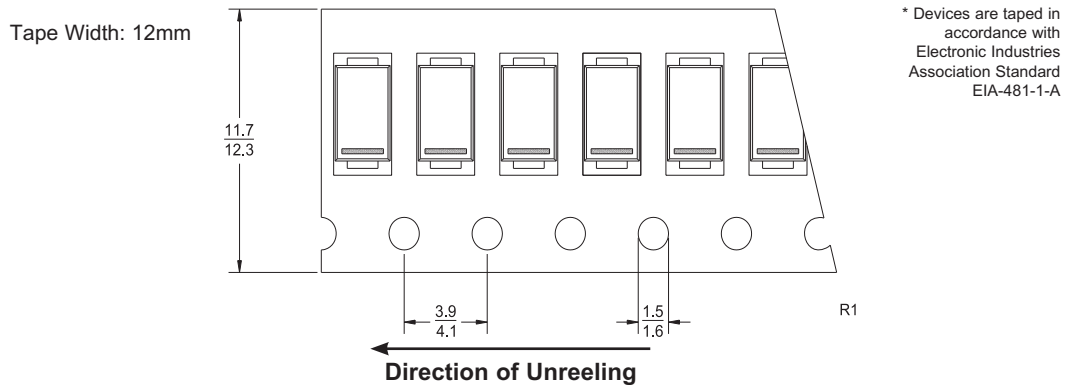
R2 (4-March 2010)

# Package Details

## SMA Case



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



### Packaging Base

13" Reel = 5,000 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 and Ship Date.

### Reel Packing Information

Reel Size	Reels per Box (Maximum)	Parts per Box (Maximum)	Box Dimensions		Shipping Weight (Max.)	
			INCH	CM	LB	KG
13"	5	25,000	15x4x15	38x10x38	9	5
	14	70,000	15x15x9	38x38x23	23	11
	26	130,000	15x15x18	38x38x46	42	20

### Ordering Information

- For devices taped and reeled on 13" reels, add TR13 suffix to part number.
- All SMDs are available in small quantities for prototype and manual placement applications.

R2 (4-March 2010)

# Material Composition Specification

## SMA Case



Device average mass ..... 67.9 mg  
 Fluctuation margin ..... +/-10%

Component	Material	Material		Substance	CAS No.	Substance		
		(%wt)	(mg)			(%wt)	(mg)	(ppm)
active device	doped Si	1.12%	0.76	Si	7440-21-3	1.12%	0.76	11,193
leadframe	copper	40.64%	27.59	Cu	7440-50-8	40.64%	27.59	406,351
die attach	high temperature solder paste	3.31%	2.25	Pb	7439-92-1	3.06%	2.081	30,649
				Sn	7440-31-5	0.17%	0.113	1,664
				Ag	7440-22-4	0.08%	0.056	825
encapsulation*	EMC	54.04%	36.69	silica	7631-86-9	36.75%	24.95	367,468
				epoxy resin	29690-82-2	10.81%	7.338	108,075
				phenol resin	9003-35-4	5.4%	3.669	54,038
				Sb <sub>2</sub> O <sub>3</sub>	1309-64-4	0.54%	0.367	5,405
				Br	7726-95-6	0.54%	0.367	5,405
	EMC GREEN	54.04%	36.69	silica (fused)	60676-86-0	41.61%	28.253	416,116
				epoxy resin	29690-82-2	5.4%	3.669	54,038
				phenol resin	9003-35-4	5.24%	3.559	52,418
				carbon black	1333-86-4	0.16%	0.11	1,620
				metal hydroxide	1309-42-8	1.62%	1.1	16,201
plating**	tin/lead process	0.89%	0.61	Sn	7440-31-5	0.71%	0.485	7,143
				Pb	7439-92-1	0.18%	0.121	1,782
	matte tin	0.89%	0.61	Sn	7440-31-5	0.89%	0.606	8,925

\*EMC GREEN molding compound is Halogen-Free.

\*\*For Lead Free plating, add suffix "LEAD 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.

R4 (3-June 2011)