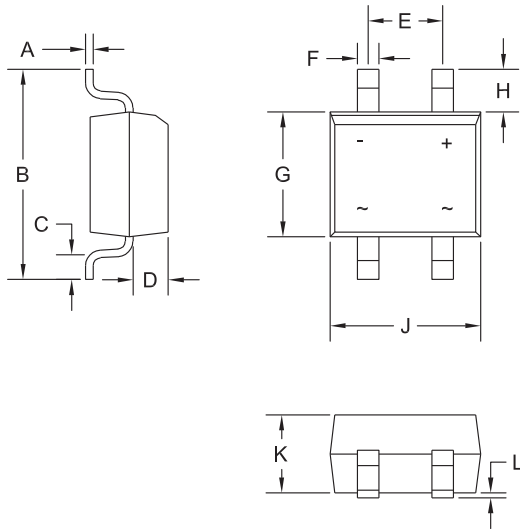


# Package Details

## HD DIP Case



### Mechanical Drawing



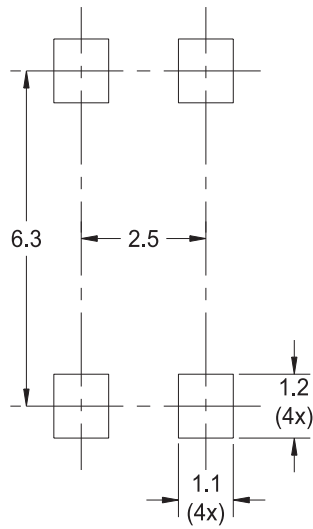
SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.006	0.014	0.15	0.35
B	-	0.275	-	7.00
C	0.027	0.043	0.70	1.10
D	0.035	0.051	0.90	1.30
E	0.090	0.106	2.30	2.70
F	0.019	0.031	0.50	0.80
G	0.150	0.165	3.80	4.20
H	0.051	0.067	1.30	1.70
J	0.177	0.193	4.50	4.90
K	0.090	0.106	2.30	2.70
L	0.000	0.008	0.00	0.20

HD DIP (REV: R2)

R2

Part Marking: 4-5 Character Alpha/Numeric Code

### Mounting Pad Geometry (Dimensions in mm)



R1

R3 (4-March 2010)

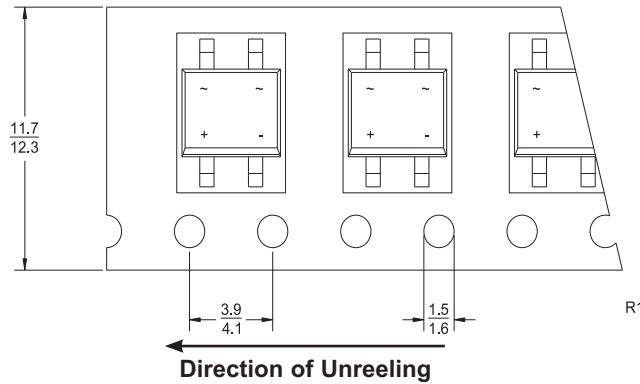
# Package Details

## HD DIP Case



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

Tape Width: 12mm



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

### Packaging Base

13" 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
13"	5	15,000	15x4x15	38x10x38	9	4
	14	42,000	15x15x9	38x38x23	25	12
	26	78,000	15x15x18	38x38x46	46	21

### 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.

R3 (4-March 2010)

# Material Composition Specification

## HD DIP Case



Device average mass . . . . . 126.8 mg  
 Fluctuation margin . . . . . +/-10%

Component	Material	Material		Substance	CAS No.	Substance		
		(%wt)	(mg)			(%wt)	(mg)	(ppm)
active device	doped Si	3.38%	4.28	Si	7440-21-3	3.38%	4.28	33,754
leadframe	Cu alloy	33.5%	42.49	Cu	7440-50-8	33.44%	42.405	334,424
				Fe	7439-89-6	0.05%	0.064	505
				P	7723-14-0	0.01%	0.018	142
die attach	high temperature solder paste	7.16%	9.08	Pb	7439-92-1	6.624%	8.399	66,238
				Sn	7440-31-5	0.358%	0.454	3,580
				Ag	7440-22-4	0.179%	0.227	1,790
encapsulation*	EMC	55.48%	70.34	SiO <sub>2</sub>	14808-60-7	37.72%	47.834	377,240
				epoxy resin	29690-82-2	10.54%	13.365	105,402
				phenol resin	9003-35-4	5.55%	7.034	55,473
				Sb <sub>2</sub> O <sub>3</sub>	1309-64-4	0.55%	0.703	5,544
				Br	7726-95-6	1.11%	1.407	11,096
	EMC GREEN	55.48%	70.34	silica (fused)	60676-86-0	42.72%	54.165	427,169
				epoxy resin	29690-82-2	5.55%	7.034	55,473
				phenol resin	9003-35-4	5.38%	6.823	53,809
				carbon black	1333-86-4	0.17%	0.211	1,664
				metal hydroxide	1309-42-8	1.66%	2.11	16,640
plating**	tin/lead process	0.48%	0.61	Sn	7440-31-5	0.38%	0.488	3,849
				Pb	7439-92-1	0.10%	0.122	962
	matte tin	0.48%	0.61	Sn	7440-31-5	0.48%	0.61	4,811

\*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.

R4 (16-July 2018)