



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Features

- Size: 4 mm diameter, 4.2 mm length
- Mini-surface mount footprint
- Low capacitance
- High insulation resistance
- RoHS compliant*
-  UL Recognized

Applications

- Telecommunications equipment
- Industrial equipment/electronics
- Consumer electronics

2053 Series Light Duty 2-Electrode Miniature Gas Discharge Tube

Characteristics

Test Methods per ITU-T K.12 and IEC 61643-311.

Characteristic	Model No.				
	2053-07	2053-09	2053-14	2053-23	2053-25
DC Sparkover $\pm 20\%$ @ 100 V/s	75 V	90 V	145 V	230 V	250 V
Impulse Sparkover ⁽¹⁾					
100V/ μ s	< 700 V	< 700 V	< 700 V	< 600 V	< 600 V
1000V/ μ s	< 800 V	< 800 V	< 800 V	< 700 V	< 700 V

Characteristic	Model No.				
	2053-30	2053-35	2053-40	2053-47	2053-60
DC Sparkover $\pm 20\%$ @ 100 V/s	300 V	350 V	400 V	470 V	600 V
Impulse Sparkover ⁽¹⁾					
100V/ μ s	< 600 V	< 650 V	< 700 V	< 800 V	< 900 V
1000V/ μ s	< 700 V	< 800 V	< 800 V	< 900 V	< 1000 V

⁽¹⁾ Impulse Sparkover voltage is defined as typical values of distribution.

Insulation Resistance (IR) ⁽²⁾	50/100/250 V	> 1 G Ω
Glow Voltage	10 mA	~ 70 V
Arc Voltage	>1 A	~ 10 V
Glow-Arc Transition Current		< 1 A
Capacitance.....	1 MHz	0.5 pF typical
Maximum Impulse Discharge Current	5,000 A, 8/20 μ s.....	1 operation
	3,000 A, 8/20 μ s.....	10 operations
Nominal Alternating Discharge Current	3 A, 50 Hz, 1 second.....	1 operation
	6 A, 9 cycles.....	1 operation
Impulse Life	100 A, 10/1000 μ s.....	300 operations
DC Holdover Voltage ⁽³⁾		< 150 ms
Operating Temperature.....		-40 to +85 °C
Storage Temperature.....		-40 to +115 °C
Climatic Category (IEC 60068-1).....		40/90/21

Notes:

- UL Recognized component, UL File E153537.
- At delivery AQL 0.65 Level II, DIN ISO 2859.
- Bourns recommends reflowing surface mount devices per IPC/JEDEC J-STD-020 rev D.

⁽²⁾ DC Sparkover Voltage	DC Measuring Voltage
75–90 V	50 V
120–400 V	100 V
470–600 V	250 V

⁽³⁾ Network Applied	DC Holdover Voltage
DC Sparkover Voltage	
75–145 V	52 V
230–250 V	80 V
300–600 V	150 V

*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

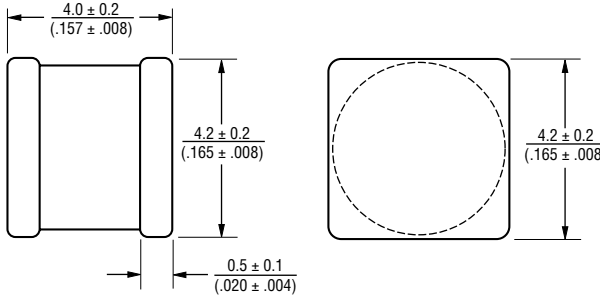
Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

2053 Series Light Duty 2-Electrode Miniature Gas Discharge Tube



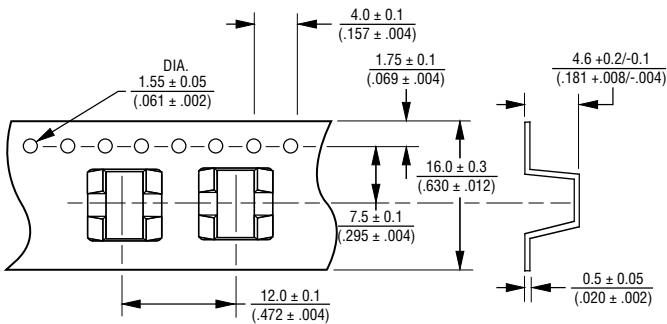
Product Dimensions



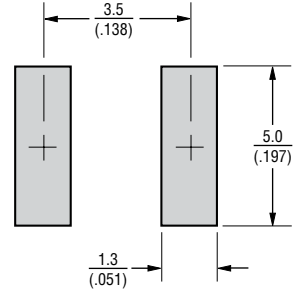
DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

Packaging Specifications

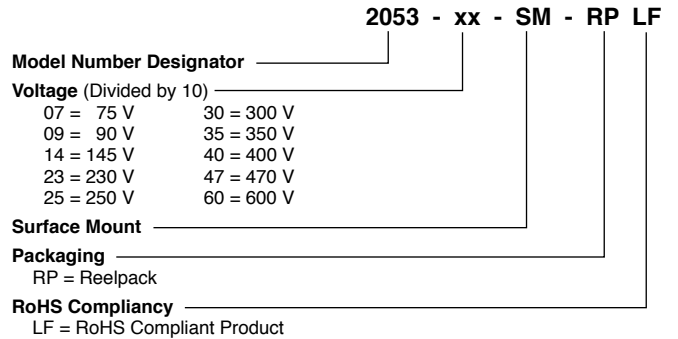
The Model 2053-xx-SM ships standard reelpack (-RP), 900 pieces per reel, 2,700 pieces per box. Reel is 330 mm in diameter and 16 mm wide.



Recommended Pad Layout



How to Order



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