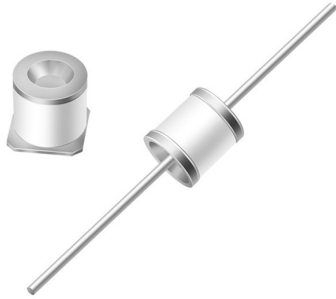


Gas Discharge Tubes



GDT introduction: Gas discharge tubes (GDT) use noble gases enclosed in ceramic tubes to provide an alternate circuit path for voltage spikes. The ceramic envelope and nickel connectors allow for high loads and surges that function at 20KA, 40KA, 50KA, 60KA, 100KA & 150KA. The breakdown voltages of the devices have a wide range with up to 20% tolerance. Major applications are high frequency telecommunication lines, stations, security systems, HID and high quality Surge Protection Devices (SPD).

Features

1. RoHS & HF compliant
2. SMD Structure
3. DC Spark-over voltage: 70~5000V
4. Low Capacitance
5. Agency Recognition : UL
6. Operating temperature: -30°C ~ +85°C Storage
7. Temperature: -40°C ~ +115°C

Recommended Applications

1. Cable Modem
2. xDSL
3. Set-Top Box
4. TV sets
5. Power supplies
6. Consumer electronics

Part Number Code

M5

Serie:
M5: $\phi 5.5 \times 6$

1

Lead Type:
0=SMD
1=Thrust

A

Modification:
A=Standard
C=Customized

230X

DC Spark-over Voltage:
90X=90V
230X=230V
102X=1000V

Gas Discharge Tubes

Electrical Characteristics

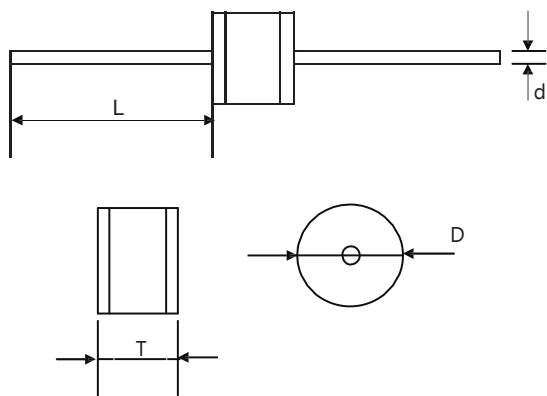
Part No.		DC Spark-over Voltage	Maximum Impulse Breakdown Voltage		Max. Impulse Discharge Current (8/20 μ s)		Impulse Life (10/1000 μ s)	Normal Alternating Discharge Current		DC Holdover Voltage	Minimum Insulation Resistance	Maximum Capacitance (1MHz)
		100V/S	100V/ μ S	1KV/ μ s	1 times	10 times	100 A	50Hz 1Sec	Single 9 Cycles	<150ms		
DIP	SMD	(V)	(V)	(V)	(KA)		Times	(A)		(V)	(G Ω)	(pF)
M51A70X	M50A70X	70 $\pm$ 20%	700	800	10	5	300	10	25	52	1	1
M51A75X	M50A75X	75 $\pm$ 20%	700	800	10	5	300	10	25	52	1	1
M51C90X	M50C90X	90 $\pm$ 20%	600	700	10	5	300	10	25	52	1	1
M51A150X	M50A150X	150 $\pm$ 20%	600	700	10	5	300	10	25	52	1	1
M51A230X	M50A230X	230 $\pm$ 20%	600	700	10	5	300	10	25	80	1	1
M51A350X	M50A350X	350 $\pm$ 20%	700	900	10	5	300	10	25	150	1	1
M51A400X	M50A400X	400 $\pm$ 20%	800	1000	10	5	300	10	25	150	1	1
M51A470X	M50A470X	470 $\pm$ 20%	900	1100	10	5	300	10	25	150	1	1
M51A600X	M50A600X	600 $\pm$ 20%	1300	1500	10	5	300	10	25	150	1	1
M51A800X	M50A800X	800 $\pm$ 20%	1500	1700	10	5	300	10	25	150	1	1
M51A102X	M50A102X	1000 $\pm$ 20%	1600	1800	10	5	300	10	25	150	1	1
M51A122X	M50A122X	1200 $\pm$ 20%	1800	2000	10	5	300	10	25	150	1	1
M51A152X	M50A152X	1500 $\pm$ 20%	2200	2400	10	5	300	10	25	150	1	1
M51A202X	M50A202X	2000 $\pm$ 20%	2800	3000	5	3	300	10	25	150	1	1
M51A252X	M50A252X	2500 $\pm$ 20%	3300	3500	5	3	300	10	25	150	1	1
M51A302X	M50A302X	3000 $\pm$ 20%	3800	4000	5	3	300	10	25	150	1	1
M51A362X	M50A362X	3600 $\pm$ 20%	4400	4600	5	3	300	10	25	150	1	1
M51A402X	M50A402X	4000 $\pm$ 20%	4800	4900	5	2	300	10	25	150	1	1
M51A452X	M50A452X	4500 $\pm$ 20%	5000	5300	5	2	300	10	25	150	1	1
M51A502X	M50A502X	5000 $\pm$ 20%	6000	6500	5	2	300	10	25	150	1	1

DC Spark-over Voltage	DC Measuring Voltage
70-90V	50V
150-400V	100V
1000-5000V	250V

Dimension

M51 (Axial lead type)

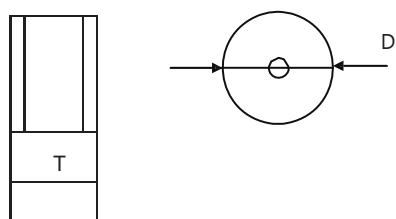
Unit:mm



Item	Dimensions	
	Spec.	Tolerance
D	5.5	+0.3/-0.5
T	6.0	+0.3/-0.5
L	20	Min.
d	0.8	±0.05

M50 (No lead type)

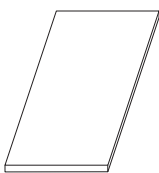
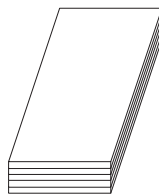
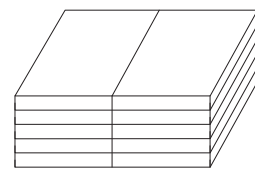
Unit:mm



Item	Dimensions	
	Spec.	Tolerance
D	5.5	+0.3/-0.5
T	6.0	+0.3/-0.5

Packaging Taping

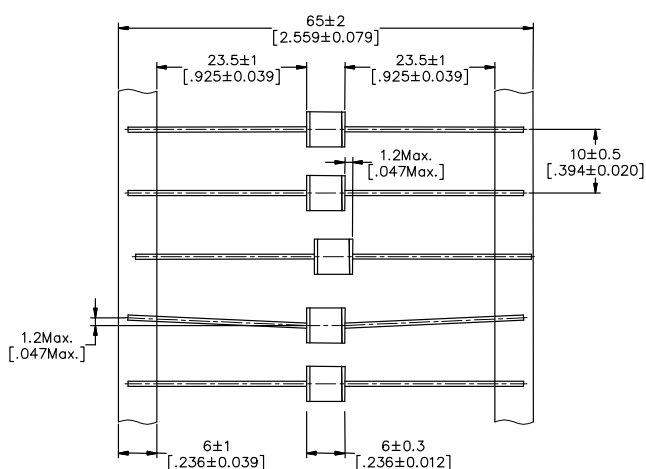
Unit:mm

Plastic Tray (265×147×10mm)	Inner Box (270×145×50mm)	Outside Box (310×280×275mm)
		
100 PCS/ Plastic Tray	500 PCS/ Box	5,000 PCS/ Carton

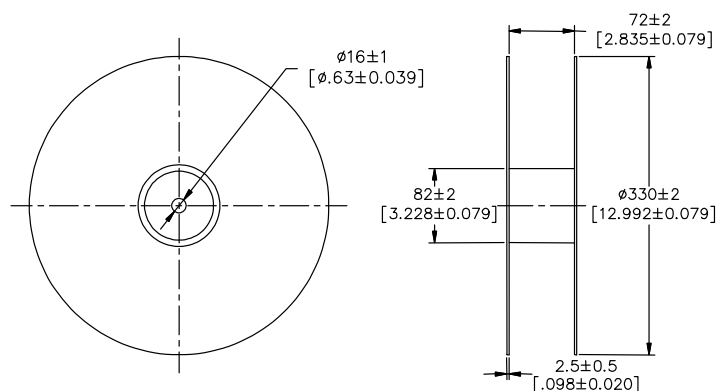
Gas Discharge Tubes

Axial Packaging (Tape & Reel)

Tape



Reel

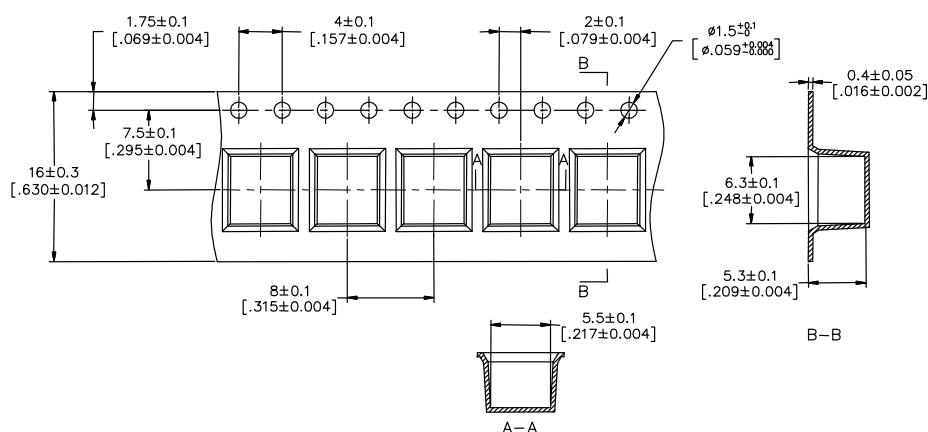


Packaging Quantity:

1000 PCS per reel

SMD Packaging (Tape & Reel)

Tape



Reel

