

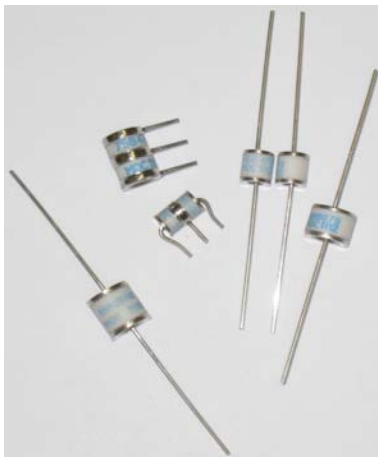


**Maida Development Company**

# **GDT SERIES**

## **Gas Discharge Tube**

The Gas Discharge Tube, or GDT, Series are designed to withstand the rigors of overvoltages and transient currents with excellent surge current to size ratio. GDT's exhibit very low capacitance values which are beneficial in numerous applications: including data and communication protection. The GDT Series are also used in AC power line applications as they exhibit no leakage current and have small to large surge capabilities. Standard and custom sizes are available with no wire lead, wire leads, and surface mount options. Standard and custom voltages are also available.



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## INTRODUCTION

The Gas Discharge Tube (GDT) is an over-voltage protection device typically used against overvoltages caused by transients such as lightning. The purpose of a GDT, similar to a varistor, is to redirect the transient condition away from the protected circuit. Gas Discharge Tubes exhibit very low capacitance values which are beneficial in data and communication protection. GDT's are also used in AC power line applications as they exhibit no leakage currents.

Maida's GDT's are offered in various configurations with numerous operating voltages and maximum surge current ratings. The GDT's are manufactured in no leads, 2 and 3 lead configurations as well as surface mount.

## STYLE DESIGNATION

The following is the standard part numbering system when ordering our Gas Discharge Tube (GDT) components:

**EX: 55A090**

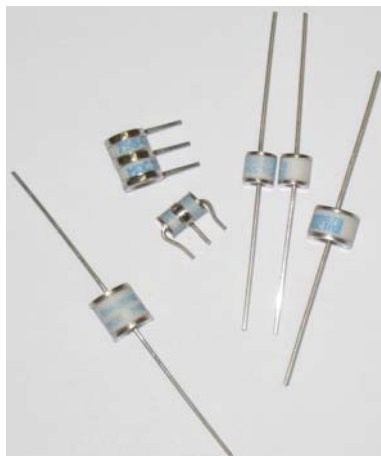
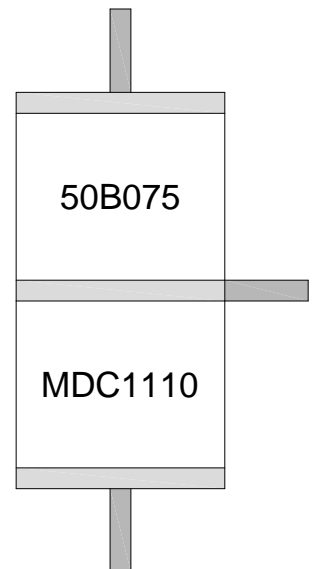
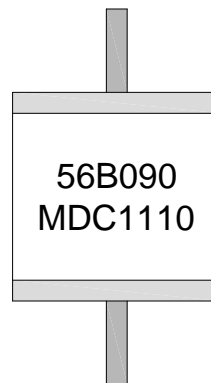
- 1.) Nominal Diameter (mm) ————↑↑↑
- 2.) Nominal Height (mm) ————↑↑
- 3.) Lead Configuration ————↑  
    A – no leads  
    B – leads
- 4.) Nominal DC Breakdown Voltage ————↑  
    e.g. 090 is 90V  
        151 is 150V  
        3000 is 3000V

## STANDARD MARKING

Minimum marking information shall consist of the style designation, manufacturer's initials, and a date code.

56B090  
MDC1110

50B075  
MDC1110



Maida Style Number (2 Electrode)	Nominal DC Breakdown Voltage	Impulse Breakdown Voltage	Impulse Discharge Current		Insulation Resistance	Capacitance @ 1MHz	AC Discharge Current
	(V)	(V)	1X (kA)	10X (kA)	(MΩ)	(pF)	
55A075	75	600	10	5	1000	1	5A, 5 times
55A090	90	600	10	5	1000	1	5A, 5 times
55A150	150	650	10	5	1000	1	5A, 5 times
55A230	230	650	10	5	1000	1	5A, 5 times
55A350	350	800	10	5	1000	1	5A, 5 times
56A075	75	600	10	5	1000	1.5	5A, 5 times
56A090	90	600	10	5	1000	1.5	5A, 5 times
56A150	150	650	10	5	1000	1.5	5A, 5 times
56A230	230	650	10	5	1000	1.5	5A, 5 times
56A350	350	850	10	5	1000	1.5	5A, 5 times
56A470	470	1000	10	5	1000	1.5	5A, 5 times
56B075	75	600	10	5	1000	1.5	5A, 5 times
56B090	90	600	10	5	1000	1.5	5A, 5 times
56B150	150	650	10	5	1000	1.5	5A, 5 times
56B230	230	650	10	5	1000	1.5	5A, 5 times
56B350	350	850	10	5	1000	1.5	5A, 5 times
56B470	470	1000	10	5	1000	1.5	5A, 5 times
86A075	75	600	20	10	1000	1.5	10A. 5 times
86A090	90	600	20	10	1000	1.5	10A. 5 times
86A150	150	650	20	10	1000	1.5	10A. 5 times
86A230	230	650	20	10	1000	1.5	10A. 5 times
86A350	350	800	20	10	1000	1.5	10A. 5 times
86A470	470	1000	20	10	1000	1.5	10A. 5 times
86A600	600	1100	20	10	1000	1.5	10A. 5 times
86A800	800	1400	20	10	1000	1.5	10A. 5 times
86A1000	1000	1600	20	10	1000	1.5	10A. 5 times
86B075	75	600	20	10	1000	1.5	10A. 5 times
86B090	90	600	20	10	1000	1.5	10A. 5 times
86B150	150	650	20	10	1000	1.5	10A. 5 times
86B230	230	650	20	10	1000	1.5	10A. 5 times
86B350	350	800	20	10	1000	1.5	10A. 5 times
86B470	470	1000	20	10	1000	1.5	10A. 5 times
86B600	600	1100	20	10	1000	1.5	10A. 5 times
86B800	800	1400	20	10	1000	1.5	10A. 5 times
86B1000	1000	1600	20	10	1000	1.5	10A. 5 times
86A0752	75	600	25	20	1000	1.5	20A, 5 times
86A0902	90	600	25	20	1000	1.5	20A, 5 times
86A1502	150	650	25	20	1000	1.5	20A, 5 times
86A6002	600	900	25	20	1000	1.5	20A, 5 times
86B0752	75	600	25	20	1000	1.5	20A, 5 times
86B0902	90	600	25	20	1000	1.5	20A, 5 times
86B1502	150	650	25	20	1000	1.5	20A, 5 times
86B6002	600	900	25	20	1000	1.5	20A, 5 times
88B800	800	1200	20	10	1000	1.5	10A. 5 times
88B1000	1000	1400	20	10	1000	1.5	10A. 5 times
88B1500	1500	2500	10	5	1000	1.5	5A, 5 times
88B2500	2500	3500	5	2.5	1000	1.5	2.5A, 5 times
88B3000	3000	4000	5	2.5	1000	1.5	2.5A, 5 times

Maida Style Number (3 Electrode)	Nominal DC Breakdown Voltage	Impulse Breakdown Voltage	Impulse Discharge Current		Insulation Resistance	Capacitance @ 1MHz	AC Discharge Current
	(V)	(V)	1X (kA)	10X (kA)	(MΩ)	(pF)	
50B075F	75V	600	10	5	1000	1.5	5A, 5 times
50B090F	90V	600	10	5	1000	1.5	5A, 5 times
50B150F	150V	650	10	5	1000	1.5	5A, 5 times
50B230F	230V	700	10	5	1000	1.5	5A, 5 times
50B350F	350V	900	10	5	1000	1.5	5A, 5 times
50B075	75V	600	10	5	1000	1.5	5A, 5 times
50B090	90V	600	10	5	1000	1.5	5A, 5 times
50B150	150V	650	10	5	1000	1.5	5A, 5 times
50B230	230V	700	10	5	1000	1.5	5A, 5 times
50B350	350V	900	10	5	1000	1.5	5A, 5 times
50A075F	75V	600	10	5	1000	1.5	5A, 5 times
50A090F	90V	600	10	5	1000	1.5	5A, 5 times
50A150F	150V	650	10	5	1000	1.5	5A, 5 times
50A230F	230V	700	10	5	1000	1.5	5A, 5 times
50A350F	350V	900	10	5	1000	1.5	5A, 5 times
50A075	75V	600	10	5	1000	1.5	5A, 5 times
50A090	90V	600	10	5	1000	1.5	5A, 5 times
50A150	150V	650	10	5	1000	1.5	5A, 5 times
50A230	230V	700	10	5	1000	1.5	5A, 5 times
50A350	350V	900	10	5	1000	1.5	5A, 5 times
60A075	75V	600	20	10	1000	1.5	5A, 5 times
60A090	90V	600	20	10	1000	1.5	5A, 5 times
60A150	150V	650	20	10	1000	1.5	5A, 5 times
60A230	230V	650	20	10	1000	1.5	5A, 5 times
60A350	350V	800	20	10	1000	1.5	5A, 5 times
60B075	75V	600	20	10	1000	1.5	10A, 5 times
60B090	90V	600	20	10	1000	1.5	10A, 5 times
60B150	150V	650	20	10	1000	1.5	10A, 5 times
60B230	230V	650	20	10	1000	1.5	10A, 5 times
60B350	350V	800	20	10	1000	1.5	10A, 5 times
75B075F	75V	600	20	10	1000	1.5	10A, 5 times
75B090F	90V	600	20	10	1000	1.5	10A, 5 times
75B150F	150V	650	20	10	1000	1.5	10A, 5 times
75B230F	230V	700	20	10	1000	1.5	10A, 5 times
75B350F	350V	850	20	10	1000	1.5	10A, 5 times
75B470F	470V	1000	20	10	1000	1.5	10A, 5 times
75B600F	600V	1100	20	10	1000	1.5	10A, 5 times
75B075	75V	600	20	10	1000	1.5	10A, 5 times
75B090	90V	600	20	10	1000	1.5	10A, 5 times
75B150	150V	650	20	10	1000	1.5	10A, 5 times
75B230	230V	700	20	10	1000	1.5	10A, 5 times
75B350	350V	850	20	10	1000	1.5	10A, 5 times
75B470	470V	1000	20	10	1000	1.5	10A, 5 times
75B600	600V	1100	20	10	1000	1.5	10A, 5 times
80B090F	90V	600	20	10	1000	1.5	10A, 5 times
80B150F	150V	600	20	10	1000	1.5	10A, 5 times
80B230F	230V	650	20	10	1000	1.5	10A, 5 times
80B350F	350V	800	20	10	1000	1.5	10A, 5 times
80B470F	470V	1000	20	10	1000	1.5	10A, 5 times
80B090	90V	600	20	10	1000	1.5	10A, 5 times

Maida Style Number (3 Electrode)	Nominal DC Breakdown Voltage	Impulse Breakdown Voltage	Impulse Discharge Current		Insulation Resistance (MΩ)	Capacitance @ 1MHz (pF)	AC Discharge Current
	(V)	(V)	1X (kA)	10X (kA)			
80B150	150V	600	20	10	1000	1.5	10A, 5 times
80B230	230V	650	20	10	1000	1.5	10A, 5 times
80B350	350V	800	20	10	1000	1.5	10A, 5 times
80B470	470V	1000	20	10	1000	1.5	10A, 5 times
68B230	230V	700	20	10	1000	1.5	10A, 5 times
68B350	350V	850	20	10	1000	1.5	10A, 5 times
68B400	400V	950	20	10	1000	1.5	10A, 5 times

Maida Style Number (SMD)	Nominal DC Breakdown Voltage	Impulse Breakdown Voltage	Impulse Discharge Current		Insulation Resistance (MΩ)	Capacitance @ 1MHz (pF)	AC Discharge Current
	(V)	(V)	1X (kA)	10X (kA)			
5T090	90V	600	10	5	1000	1.5	5A, 5 times
5T230	230V	650	10	5	1000	1.5	5A, 5 times
5T350	350V	850	10	5	1000	1.5	5A, 5 times
5T420	420V	950	10	5	1000	1.5	5A, 5 times
6T090	90V	600	10	5	1000	1	5A, 5 times
6T230	230V	650	10	5	1000	1	5A, 5 times
6T350	350V	850	10	5	1000	1	5A, 5 times
6T1200	1200V	1600	10	5	1000	1	5A, 5 times
6T0901	90V	600	2	1	1000	0.8	1A, 5 times
6T1501	150V	600	2	1	1000	0.8	1A, 5 times
6T2301	230V	650	2	1	1000	0.8	1A, 5 times
6T3001	300V	800	2	1	1000	0.8	1A, 5 times
6T3501	350V	850	2	1	1000	0.8	1A, 5 times
6T4001	400V	950	2	1	1000	0.8	1A, 5 times