

# Gas Discharge Tube

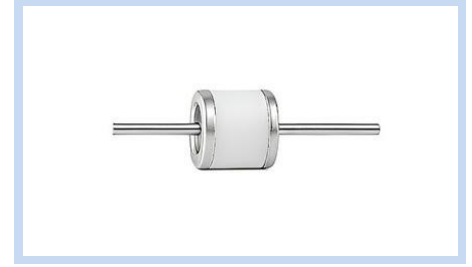
## 8.0x6.0mm 2 Poles Axial Leaded

MGT8-2DTx Series

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### FEATURE

- Ultra-Fast Surge Response
- High Surge Current Capability
- High Holder Voltage, High Insulation Resistance
- Low capacitance ( $\leq 1.5\text{pF}$ ), Micro-Gap Design
- Applications: Repeaters, Modems, Telephone Interface, Line Cards, Data Communication Equipment, Line Test Equipment
- UL Safety Approved Certification No: E223045

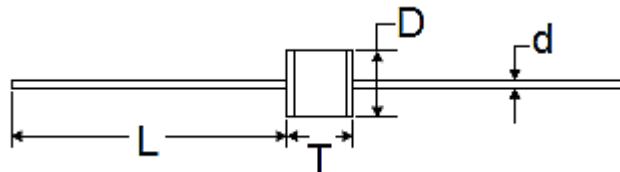


### ELECTRICAL CHARACTERISTICS

Part Number	DC Spark-over Voltage	Impulse Spark-over Voltage	Impulse Discharge Current	Alternating Discharge Current	Impulse Life	Minimum Insulation Resistance		Maximum Capacitance
	100V/s	1KV/ $\mu\text{s}$	8/20 $\mu\text{s}$ , 10times	50Hz, 1sec	10/1K $\mu\text{s}$ , 100A	$V_T$	IR	1MHz/1V
8.0x6.0mm	(V)	(V)	(KA)	(A)	(Times)	(V <sub>DC</sub> )	(G $\Omega$ )	(pF)
MGT8P075MCB2DT	75 $\pm$ 20%	600	20	20	500	25	1	1.5
MGT8P090MCB2DT	90 $\pm$ 20%	600	20	20	500	50	1	1.5
MGT8P145MCB2DT	145 $\pm$ 20%	700	20	20	500	100	1	1.5
MGT8P150MCB2DT	150 $\pm$ 20%	700	20	20	500	100	1	1.5
MGT8P230MCB2DT	230 $\pm$ 20%	700	20	20	500	100	1	1.5
MGT8P250MCB2DT	250 $\pm$ 20%	800	20	20	500	100	1	1.5
MGT8P300MCB2DT	300 $\pm$ 20%	900	20	20	500	100	1	1.5
MGT8P350MCB2DT	350 $\pm$ 20%	900	20	20	500	100	1	1.5
MGT8P400MCB2DT	400 $\pm$ 20%	1000	20	20	500	100	1	1.5
MGT8P470MCB2DT	470 $\pm$ 20%	1100	20	20	500	250	1	1.5
MGT8P600MCB2DT	600 $\pm$ 20%	1300	20	20	500	250	1	1.5
MGT8P800MCB2DT	800 $\pm$ 20%	1500	20	20	500	250	1	1.5

Note: Operating Temperature: -40°C ~ +85°C

### DIMENSIONS



Unit: mm

Series	D	T	d	L
MGT8-2DTx	7.5~8.3	5.5~6.3	1.0 $\pm$ 0.1	30.0 Max

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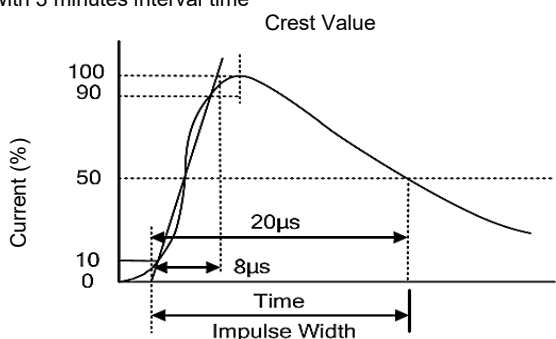
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### PART NUMBERING SYSTEM

**MGT** **8** **P** **075M** **CB2DT** **R**  
 (1) (2) (3) (4) (5) (6)

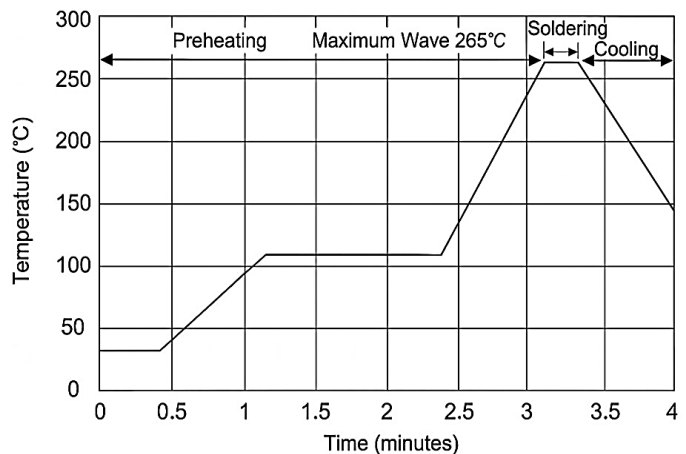
No	Item	Code	Description	
(1)	Product Code	MGT	Gas Discharge Tube series	
(2)	Size Code	8	8.0mm Diameter	DxT: 8.0x6.0mm
(3)	Discharge Current	P	P: 20KA, 8/20 $\mu$ s, 10 times	M: 10KA
(4)	DC Spark Over Voltage	075M	75V $\pm$ 20%(M)	DC Spark Over Voltage, 100V/s
(5)	Series Code	CB2DT	CB2DT: 2 Poles Round Axial Leaded	Internal Control Reference
(6)	Package Type	R	R: Tape and Reel	Y: Tray and Box

### ELECTRICAL RATING

Item	Test Condition	Requirement
<b>DC Spark-over Voltage</b>	The voltage is measured with voltage ramp $dv/dt = 100V/s$ .	To meet the specified value
<b>Maximum Impulse Spark-over Voltage</b>	The voltage is measured with voltage ramp $dv/dt = 1000V/\mu s$ .	
<b>Impulse Discharge Current</b>	Maximum 8/20 $\mu s$ surge current that can be applied between two electrodes, 5 positive and 5 negative surges, with 3 minutes interval time 	
<b>Alternating Discharge Current</b>	Rated RMS value of AC current at 50Hz, 1 second for 10 times with interval time 3 minutes. $IR > 10^8 \Omega$	
<b>Insulation Resistance</b>	The resistance of gas tube shall be measured between two electrodes.	
<b>Capacitance</b>	The capacitance of gas tube shall be measured between two electrodes. Test frequency: 1MHz	

### RECOMMENDED SOLDERING PROFILES

Wave Soldering Condition	
Peak Temp.	265°C
Dipping Time	10 sec
Solder	1 time



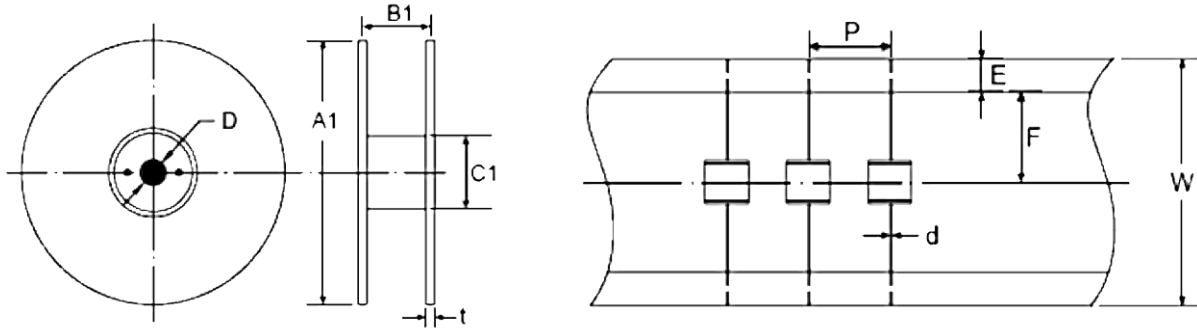
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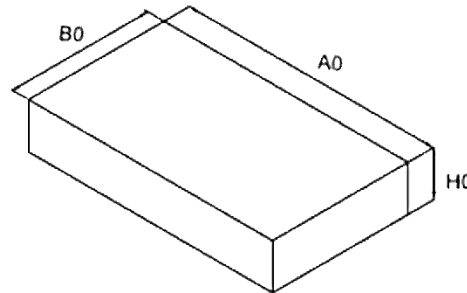
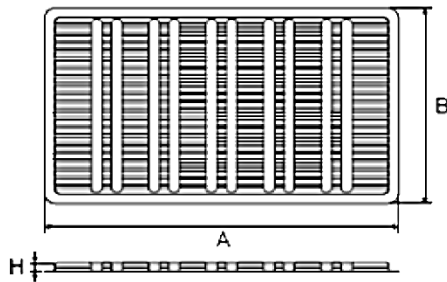
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### PACKAGING SPECIFICATION



Unit: mm

Package	A1±2.0	B1±2.0	C1±2.0	D±0.5	t±0.2	P±0.5	W±1.0	E±0.5	F±0.5	d±0.1	Qty
Reel	330	70.0	82.0	25.0	2.0	10.0	65.0	6.0	26.5	1.0	500



Unit: mm

Package	A±5.0	B±5.0	H±0.5	Qty /Tray	A0±2.0	B1±2.0	H0±2.0	Qty/Box
Tray	265	146	8.5	100	270	150	50	500

\*Specifications subject to change without notice.