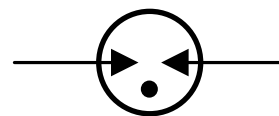


Features

- Stable breakdown voltage
- High insulation resistance
- High current rating
- Low capacitance ($\leq 1.5\text{pF}$)
- Stable performance over life
- Large absorbing transient current capability
- Fast response time
- RoHS compliant
- Standard Size: 8.0mm*6.0mm
- Meets MSL level 1, per J-STD-020
- Storage and operating temperature: $-40^{\circ}\text{C} \sim +90^{\circ}\text{C}$

GDT Graphical Symbol



Applications

- Repeaters, Modems
- Subscriber protection
- Telephone Interface, Line cards
- Data communication equipment
- Line test equipment
- Branch exchange
- Subscriber protection
- Alarm system
- Tuner
- Antenna protection

Dimensions

<p>L Type</p>	Item	Dimensions(mm)
	D	8.0±0.3
<p>M Type</p>	T	6.0±0.3
	d (10KA)	0.8±0.1
	d (20KA)	1.0±0.1
	L	30.0 Max.
	B	0.5±0.1

Electrical Characteristics (T_A=25°C)

Part Number	Marking	DC Spark-over Voltage	Maximum Impulse Spark-over Voltage	Nominal Impulse Discharge Current	Alternating Discharge Current	Impulse Life	Minimum Insulation Resistance		Maximum Capacitance	
							Test Voltage	GΩ		
		100V/s	1000V/μs	8/20μs, 10 times	50Hz, 1sec	10/1000μs, 100A			1MHz	
K2RM075L-8	K2RM075M-8	075	75V±20%	600V	10KA	10A	300 times	25VDC	1	1.5pF
K2RM090L-8	K2RM090M-8	090	90V±20%	600V	10KA	10A	300 times	50VDC	1	1.5pF
K2RM150L-8	K2RN150M-8	150	150V±20%	700V	10KA	10A	300 times	100VDC	1	1.5pF
K2RM230L-8	K2RM230M-8	230	230V±20%	700V	10KA	10A	300 times	100VDC	1	1.5pF
K2RM250L-8	K2RM250M-8	250	250V±20%	800V	10KA	10A	300 times	100VDC	1	1.5pF
K2RM300L-8	K2RM300M-8	300	300V±20%	900V	10KA	10A	300 times	100VDC	1	1.5pF
K2RM350L-8	K2RM350M-8	350	350V±20%	900V	10KA	10A	300 times	100VDC	1	1.5pF
K2RM400L-8	K2RM400M-8	400	400V±20%	1000V	10KA	10A	300 times	100VDC	1	1.5pF
K2RM470L-8	K2RM470M-8	470	470V±20%	1100V	10KA	10A	300 times	250VDC	1	1.5pF
K2RM600L-8	K2RM600M-8	600	600V±20%	1300V	10KA	10A	300 times	250VDC	1	1.5pF
K2RM800L-8	K2RM800M-8	800	800V±20%	1500V	10KA	10A	300 times	250VDC	1	1.5pF

Electrical Characteristics (T_A=25°C)

Part Number		Marking	DC Spark-over Voltage	Maximum Impulse Spark-over Voltage	Nominal Impulse Discharge Current	Alternating Discharge Current	Impulse Life	Minimum Insulation Resistance		Maximum Capacitance
			100V/s	1000V/μs	8/20μs, 10 times	50Hz, 1sec	10/1000μs, 100A	Test Voltage	GΩ	1MHz
K2RM1000L-8	K2RM1000M-8	1000	1000V±20%	1900V	10KA	5A	300 times	500VDC	1	1.5pF
K2RM1200L-8	K2RM1200M-8	1200	1200V±20%	2000V	10KA	5A	300 times	500VDC	1	1.5pF
K2RM1400L-8	K2RM1400M-8	1400	1400V±20%	2200V	10KA	5A	300 times	500VDC	1	1.5pF
K2RM1500L-8	K2RM1500M-8	1500	1500V±20%	2300V	10KA	5A	300 times	500VDC	1	1.5pF
K2RM1600L-8	K2RM1600M-8	1600	1600V±20%	2400V	10KA	5A	300 times	500VDC	1	1.5pF

Test Methods and Results

Items	Test Method	Standard
DC Spark-over Voltage	measured with voltage ramp dv/dt=100V/s.	To meet the specified value
Maximum Impulse Spark-over Voltage	measured with voltage ramp dv/dt=1000V/μs.	
Impulse Discharge Current	applied between two electrodes, 5 positive and 5 negative surges, with 3 minutes interval time,	
Alternating Discharge Current	Rated RMS value of AC current at 50Hz, 1 sec. for 10 times with interval time 3 min.	
Insulation Resistance	measured between two electrodes.	
Capacitance	measured between two electrodes. Test frequency: 1MHz	

Soldering Parameters

Wave Soldering		Reflow Soldering	
<p>The graph shows temperature (°C) on the y-axis (0 to 300) versus time (seconds) on the x-axis (0 to 240). The profile starts at 25°C, rises through a preheat phase to a dwell time at approximately 265°C, and then cools down. Key phases are labeled: Preheat Time, Dwell Time, and Cooling Time.</p>		<p>The graph shows temperature (°C) on the y-axis (25 to 260) versus time on the x-axis. The profile includes a preheat phase (from 25°C to $T_{S(max)}$), a ramp-up phase (from $T_{S(max)}$ to T_L), a critical zone (at T_L to T_P), a dwell time (t_p) at peak temperature T_P, and a ramp-down phase (from T_P to 25°C). Key parameters are labeled: T_P, T_L, $T_{S(max)}$, $T_{S(min)}$, 25, t_p, t_L, t_s, Ramp-up, Preheat, Ramp-down, Critical Zone T_L to T_P, and time to peak temperature ($t_{25°C \text{ to peak}}$).</p>	
		Profile Feature	Pb-Free Assembly
		Average ramp-up rate (T_L to T_P)	3°C/second max.
		Preheat	
		-Temperature Min ($T_{S \text{ min}}$)	150°C
		-Temperature Max ($T_{S \text{ max}}$)	200°C
		-Time (min to max) (t_s)	60-180 seconds
		$T_{S \text{ max}}$ to T_L	
		-Ramp-up Rate	3°C/second max.
		Time maintained above:	
		-Temperature (T_L)	217°C
		-Time (t_L)	60-150 seconds
Item	Conditions	Peak Temperature (T_P)	260°C
Peak Temperature	265°C	Time within 5°C of actual Peak Temperature (t_p)	20-40 seconds
Dipping Time	10 seconds	Ramp-down Rate	6°C/second max.
Soldering	1 time	Time 25°C to Peak Temperature	8 minutes max.