Gas Discharge Tube
GSM***A Series

Features

- Electronic stability
- Small volume, easy to placement machine operation
- Large flow capacity, impact resistant ability
- Static electricity capacity, good insulation
- Reaction speed is 50 ns - 150 ns
- Storage and operating temperature -40~125℃



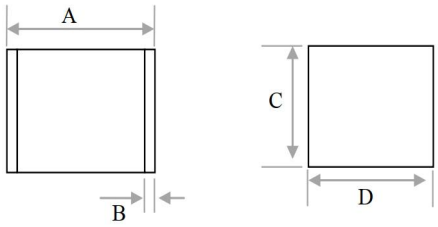
Applications

- ADSL MODEM、FAX、TELEPHONE
- RS485、RS232、CAN level of protection
- CATV
- Power supply prevents thunder common-mode protection
- Line cards

Electrical Characteristics

Part Number	DC Spark-over Voltage (@100V/s) (V)	Impulse Spark-over Voltage (@1KV/μs) (V)	Discharge Current 10hits (@8/20μs) (KA)	Min.Insulation Resistance (@DC)		Max. Capacitance (@1MHz) (pF)
				(GΩ)	Test Voltage (V)	
GSM090A	90±30%	700	1	1	50	1
GSM150A	150±20%	750	1	1	100	1
GSM200A	200±20%	800	1	1	100	1
GSM230A	230±20%	850	1	1	100	1
GSM300A	300±20%	900	1	1	100	1
GSM420A	420±20%	900	1	1	100	1
GSM470A	470±20%	1000	1	1	100	1
GSM600A	600±20%	1300	1	1	100	1
GSM800A	800±20%	1400	1	1	100	1

Dimensions

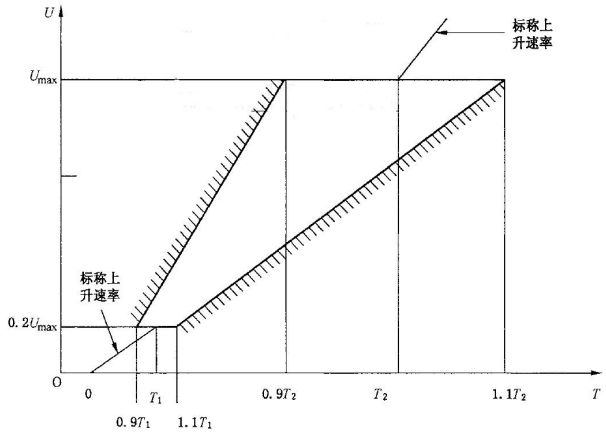


REF	mm	inch
A	3.2±0.3	0.126±0.013
B	0.3±0.2	0.013±0.008
C	2.5±0.2	0.098±0.008
D	2.5±0.2	0.098±0.008

Dimensions in millimeters

Surge arrester

DC breakdown voltage



8/20us, Test wave

T1=1.25T=8us±20%

T2=20us±20%

10/700us,Test Wave

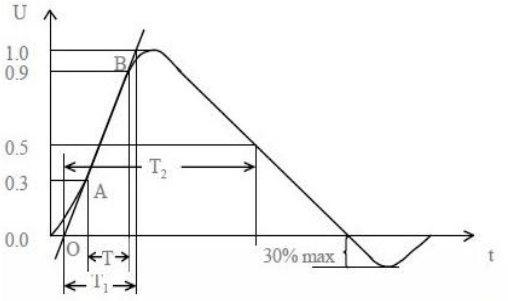
T1=1.67T=10us±20%

T2=700us±20%

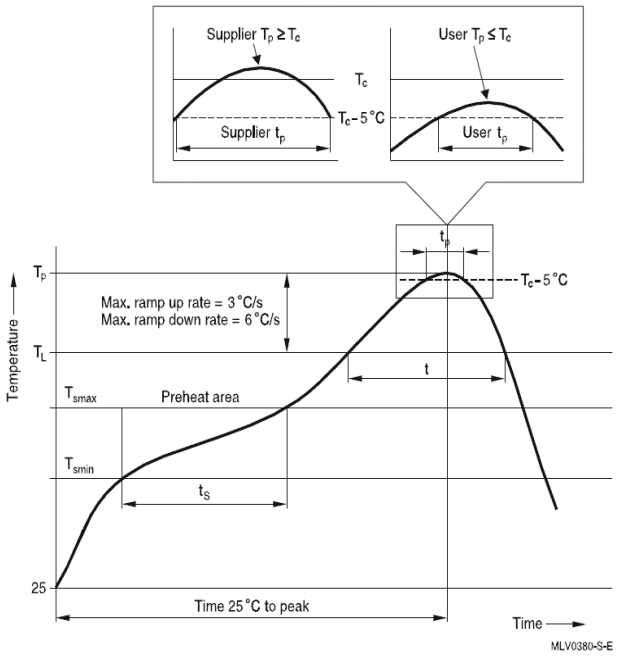
10/1000us,Test Wave

T1=1.67T=10us±20%

T2=1000us±20%



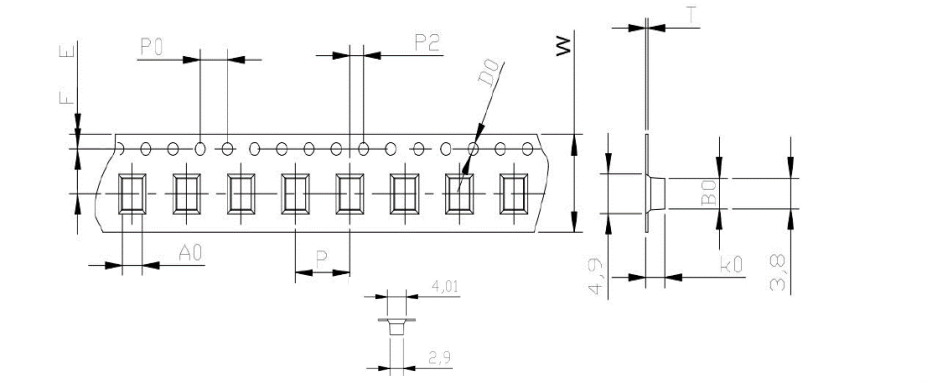
Recommended wave slodering profile



Reflow profile features		Sn- Pb eutectic assembly	Pb-free assembly
Preheat and soak - Temperature min - Temperature max - Time	 T_{smin} T_{smax} t_{smin} to t_{smax}	 100 °C 150 °C 60 ... 120 s	 150 °C 200 °C 60 ... 180 s
Average ramp-up rate	T_{smax} to T_p	max. 3 °C/ s	max. 3 °C/ s
Liquidous temperature Time at liquidous	T_L t_L	183 °C 60 ... 150 s	217 °C 60 ... 150 s
Peak package body temperature *, Classification temperature **	T_p, T_C	220 ... 235 °C **	245 ... 260 °C **
Time (t_p) ** within 5 °C of the specified classification temperature (T_C)		20 s ***	30 s ***
Average ramp-down rate	T_p to T_{smax}	max. 6 °C/ s	max. 6 °C/ s
Time 25 °C to peak temperature		max. 6 min	max. 8 min

* = Tolerance for peak profile temperature (T_p) is defined as a supplier minimum and a user maximum.
** = For details please refer to JEDEC J-STD-020D.
*** = Tolerance for time at peak profile temperature (t_p) is defined as a supplier minimum and a user maximum.

Packaging 2500pcs/reel



12.00 +0.30 -0.10	2.90 +0.08 -0.08	3.80 +0.10 -0.10	2.80 +0.10 -0.10	0.00 +0.10 -0.10	1.75 +0.10 -0.10	5.50 +0.10 -0.10	8.00 +0.10 -0.10	4.00 +0.10 -0.10	2.00 +0.10 -0.10	1.50 +0.10 -0.00	0.00 +0.10 -0.00	0.30 +0.05 -0.05
W	A_0	B_0	K_0	K_1	E	F	P	P_0	P_2	D_0	D_1	T

Cautions and warnings

- Surge arresters must not be operated directly in power supply networks
- Surge arresters may become hot in case of longer periods of current stress (danger of burning).
- If the contacts of the surge arrester are defective, current stress can lead to the formation of sparks and loud noises.
- Surge arresters may be used only within their specified values. In case of overload, the head contacts may fail or the component may be destroyed.
- Damaged surge arresters must not be re-used.