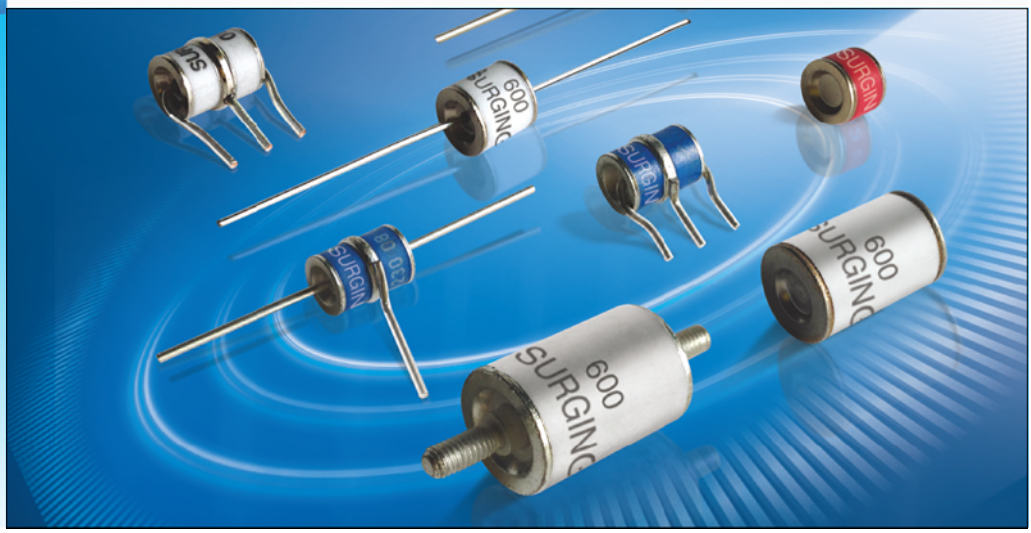
SURGiNG
紹 鑫 實 業

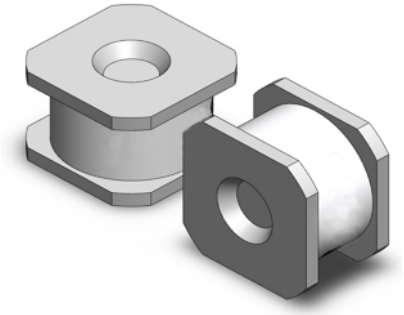


SurgeArresters

陶瓷气体放电管

SX6 Series

Gas Discharge Tubes - SX6 Series



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

Features

- RoHS & HF compliant
- Size:4.2mm*6.0mm
- DC Spark-over voltage: 75~3000V
- Stable breakdown voltage.
- High insulation resistance.
- Low capacitance (<1pF)
- High holdover voltage.
- Large absorbing transient current capability.
- Low Capacitance
- Micro-Gap Design

Recommended Applications

- Cable Modem
- xDSL
- Set-Top Box
- Satellite and CATV equipment
- Power supplier
- Consumer electronics
- General telecom equipment

Product Name

SX60 - 230X SMDT

Series:
SX6系列：φ6.2*4
SX5系列：φ5.5*6

LeadType:
0=SMD
1=Thrust

DCLineVoltage:
90X=90V
230X=230V

Package:
SMD=Cylinder No Lead
SMDT=2-SMD Cylinder Square End

Gas Discharge Tubes - SX6 Series

Electriacl Characteristics

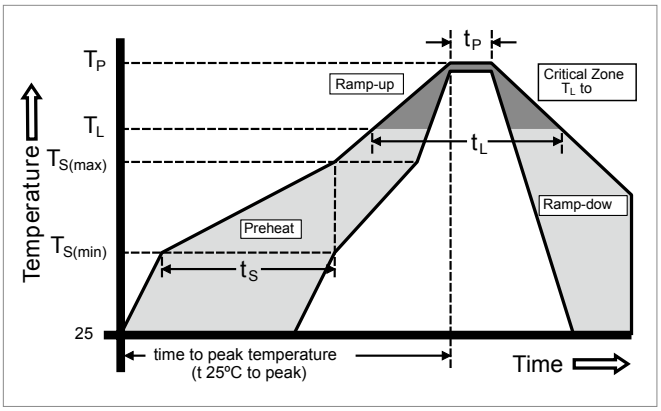
Part Number	DC Spark-over Voltage	Maximum Impulse Breakdown Voltage		Max. Impulse Discharge Current (8/20μs)		Impulse Life (10/1000μs)	Normal Alternating Discharge Current		DC Holdover Voltage	Minimum Insulation Resistance	Maximum Capacitance (1MHz)
	100V/S	100V/ μS	1KV/ μs	1 times	10 times	100 A	50Hz 1Sec	Single 9 Cycles	<150ms		
	(V)	(V)	(V)	(KA)		Times	(A)		(V)	(GΩ)	(pF)
SX60-75XSMDT	75±20%	600	700	8	5	500	5	15	52	1	0.8
SX60-90XSMDT	90±20%	600	700	8	5	500	5	15	52	1	0.8
SX60-150XSMDT	150±20%	500	700	8	5	500	5	15	52	1	0.8
SX60-230XSMDT	230±20%	500	600	8	5	500	5	15	80	1	0.8
SX60-250XSMDT	250±20%	500	600	8	5	500	5	15	150	1	0.8
SX60-300XSMDT	300±20%	550	650	8	5	500	5	15	150	1	0.8
SX60-350XSMDT	350±20%	600	700	8	5	500	5	15	150	1	0.8
SX60-400XSMDT	400±20%	650	750	8	5	500	5	15	150	1	0.8
SX60-470XSMDT	470±20%	750	850	8	5	500	5	15	150	1	0.8
SX60-600XSMDT	600±20%	900	1000	8	5	500	5	15	150	1	0.8
SX60-800XSMDT	800±20%	1000	1100	5	3	300	3	10	150	1	0.8
SX60-1000XSMDT	1000±20%	1500	1600	5	3	300	3	10	150	1	0.8
SX60-1200XSMDT	1200±20%	1700	1800	5	3	300	3	10	150	1	0.8
SX60-1800XSMDT	1800±20%	2500	2600	5	3	300	3	10	150	1	0.8
SX60-2000XSMDT	2000±20%	2700	2800	5	3	300	3	10	150	1	0.8
SX60-2500XSMDT	2500±20%	3100	3200	5	3	300	3	10	150	1	0.8
SX60-2700XSMDT	2700±20%	3300	3400	5	3	300	3	10	150	1	0.8
SX60-3000XSMDT	3000±20%	3600	3700	5	3	300	3	10	150	1	0.8

DC Spark-over Voltage	DC Measuring Voltage
75-90V	50V
150-400V	100V
470-800V	250V
1000-2000V	500V
2500-3000V	1000V

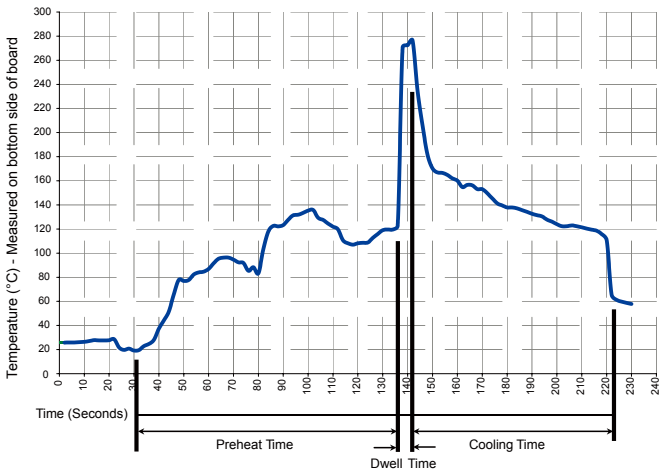
Gas Discharge Tubes - SX6 Series

Soldering parameters reflow soldering (surface mount devices)

Reflow Condition		Pb – Free assembly
Pre Heat	-Temperature Min ($T_{s(min)}$)	150°C
	-Temperature Max ($T_{s(max)}$)	200°C
	-Time (Min to Max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus Temp (T_L) to peak		3°C/second max
$T_{S(max)}$ to T_L - Ramp-up Rate		5°C/second max
Reflow	-Temperature (T_L) (Liquidus)	217°C
	-Temperature (t_L)	60 – 150 seconds
Peak Temperature (T_P)		$260^{+0/-5}$ °C
Time within 5°C of actual peak Temperature (t_p)		10 – 30 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_P)		8 minutes Max.
Do not exceed		260°C



Soldering parameters -wave soldering



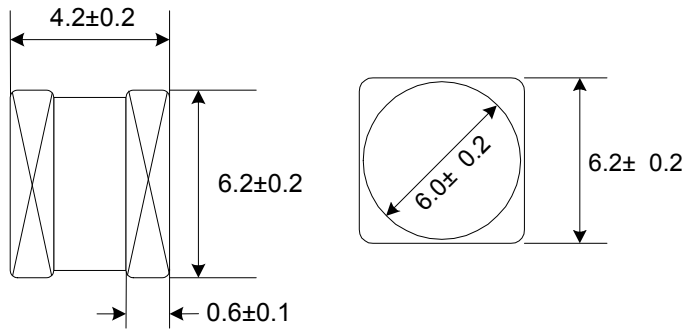
Recommended process parameters

Wave Parameter	Lead-Free Recommendatio
Preheat: (Depends on Flux Activation Temperature)	(Typical Industry Recommendation)
Temperature Minimum:	100° C
Temperature Maximum:	150° C
Preheat Time:	60-180 seconds
Solder Pot Temperature:	280° C Maximum
Solder Dwell Time:	2-5 seconds

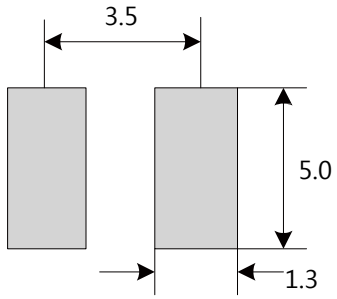
Gas Discharge Tubes - SX6 Series

Product size (Unit:mm)

Dimension

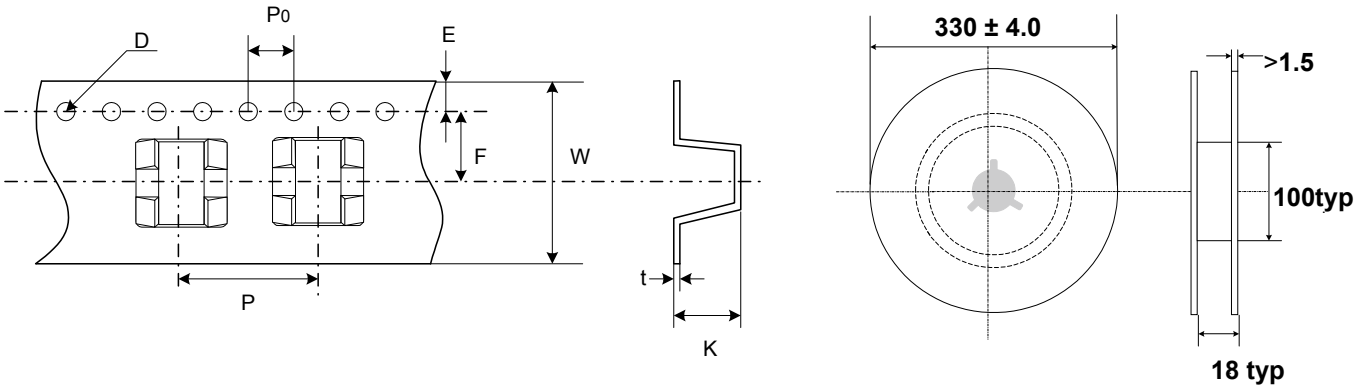


Recommended Pad Size



Packaging Taping

Unit:mm



Quantity: 900pcs per reel (13”)

Item	P	PO	W	F	E	D	K	t
Spec.	12.0	4.0	16.0	7.5	1.75	Φ1.55	6.7	0.5
Tolerance	±0.1	±0.1	±0.3	±0.1	±0.1	±0.05	±0.1	±0.05

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