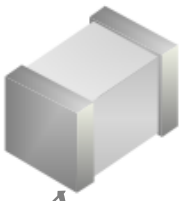
TGD-SMD Series

Gas Discharge Tubes

TOP-EMC

FEATURES

- Surface Mounted Gas Arrester
- Micro-Gap Design
- Very fast response time
- Max Surge current capacity 500A 8/20μs
- Accord with ITU-TK.21 standard 6KV 10/700μs
- Low capacitance (≤0.5pF).
- High insulation resistance.
- Size 3216(1206)
- Storage and operational temperature: -40℃ ~ +90℃



RoHS COMPLIANT

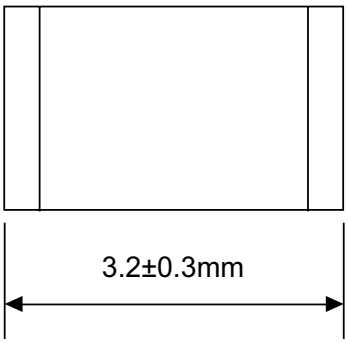
MECHANICAL DATA

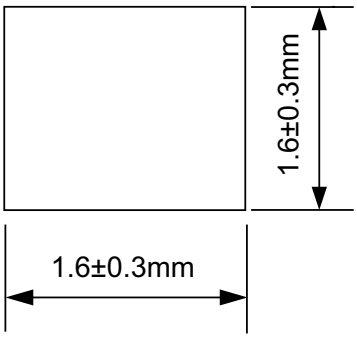
- Mounting Poition: Any
- Polarity: Bilateral and symmetrical.

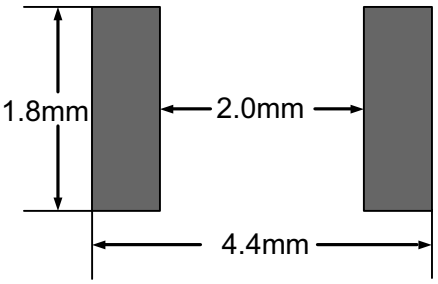
APPLICATIONS

- Repeaters, Modems.
- Telephone Interface, Line cards.
- Data communication equipment.
- Line test equipment.

DIMENSIONS







Recommended Pad Size

CHARACTERISTICS			
PARAMETER	**SYMBOL**	**VALUE**	**UNIT**
DC Speak-over voltage(SP-SMD-Series)	Vs	200-470	V
Minimum Insulation Resistance	IR	100	MΩ
Maximum Capacitance(1KHz-6Vmax)	C	0.5	PF
Surge current capacity(8/20us)	Isc	500	A

ELECTRICAL CHARACTERISTICS

Part Number	DC Spark-over Voltage	Impulse Spark-over Voltage	Minimum Insulation Resistance		Maximum Capacitance	Nominal Impulse Discharge Current	Impulse Discharge Voltage
	100V/s	1000V/μs	Test Voltage	(MΩ)	(1MHz)	8/20μs	
	(V)	(V)	DC(V)		(pF)	(A)	
TGD201M-SMD	200±30%	<950	100	1000	0.5	500	10/700μs 6kV
TGD231M-SMD	230±30%	<950	100	1000	0.5	500	
TGD301M-SMD	300±30%	<950	100	1000	0.5	500	
TGD351M-SMD	350±30%	<950	100	1000	0.5	500	
TGD401M-SMD	400±30%	<1050	100	1000	0.5	500	
TGD421M-SMD	420±30%	<1050	100	1000	0.5	500	
TGD471M-SMD	470±30%	<1050	100	1000	0.5	500	

PART NUMBER CODE

T ① GD ② 201 ③ M ④ - SMD ⑤

① Company Name: TOP-EMC

② Product Name: Gap Discharge Tubes

③ DC Spark-Over Voltage: 201:200V

④ Size:M= 3216(1206)

⑤ Potting type:SMD

Cautions and warnings

- Gas Discharge Tubes must not be operated directly in power supply networks.
- Gas Discharge Tubes may become hot in case of longer periods of current stress (danger of burning).
- Gas Discharge Tubes may be used only within their specified values. In case of overload, the head contacts may fail or the component may be destroyed.
- Damaged Gas Discharge Tubes must not be re-used.
- Operation beyond the rated voltage or current may result in rupture electrical arcing or flame.

RELIABILITY INSPECTIONS

Items	Test Condition / Description	Requirement
Cold Resistance	Measurement after -40℃/1000 HRS & normal temperature/2 HRS.	Features are conformed to rated spec.
Heat Resistance	Measurement after 125℃/1000 HRS & normal temperature/2 HRS.	
Humidity Resistance	Measurement after humidity 90~95%(45℃) /1000 HRS & normal temperature/2 HRS.	
Temperature Cycle	10 times repetition of cycle -40℃/30min →normal, temp/2 min →125℃/30min, measurement after normal temp/2 HRS.	
Solder Ability	Apply flux and immerse in molten solder 230±5℃ for 3sec up to the point of 1.5mm from body. Check for solder adhesion.	Lead wire is evenly covered by solder.
Solder Heat	Measurement after lead wire is dipped up to the point of 1.5mm from body into 260±5℃ solder for 10sec.	Conformed to rated spec.

Contact Information

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