

Gas Discharge Tubes(GDT)

Electrical Characteristics

Terms in accordance with ITU-T Rec. K.12, IEC 61643-311, GB/T 9043.

Part Number	DC Spark-over Voltage ^{1) 2)} @100V/S	Impulse Spark-over Voltage		Insulation Resistance ³⁾	Capacitance @1 MHz	Life Ratings				
		100V/μS	1KV/μS			Impulse Discharge Current @8/20μS		Impulse Life @10/1000μS 100A		
		Max	Max			Min	Max	Nominal ±5 times	Max 1 time	Min
		V	V			V	GΩ	pF	KA	KA
SMD4042-075E	75±20%	500	600	1	0.8	3	6	300		
SMD4042-090E	90±20%	500	600	1	0.8	3	6	300		
SMD4042-150E	150±20%	500	600	1	0.8	3	6	300		
SMD4042-200E	200±20%	600	700	1	0.8	3	6	300		
SMD4042-230E	230±20%	600	700	1	0.8	3	6	300		
SMD4042-300E	300±20%	750	850	1	0.8	3	6	300		
SMD4042-350E	350±20%	800	900	1	0.8	3	6	300		
SMD4042-400E	400±20%	850	950	1	0.8	3	6	300		
SMD4042-470E	470±20%	900	1000	1	0.8	3	6	300		
SMD4042-600E	600±20%	1100	1200	1	0.8	3	6	300		
SMD4042-800E	800±20%	1400	1600	1	0.8	3	6	300		
SMD4042-1000E	1000±20%	1600	1800	1	0.8	3	6	300		

Glow Voltage at 10mA..... ~60V
 Arc Voltage at 1A..... ~10V
 Glow to Arc transition Current..... ~0.5A
 Operation and storage temperature..... -40~+90°C
 Climatic category (IEC 60068-1)..... 40/90/21
 Marking..... Without

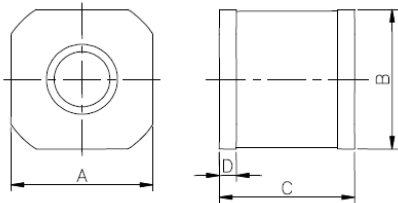
Notes :

- 1) At delivery AQL 0.65 level II, DIN ISO 2859
- 2) In ionized mode
- 3) Insulation Resistance Measuring Voltage :
 - 70V at DC 25V
 - 90V~150V at DC 50V
 - Other at DC 100V

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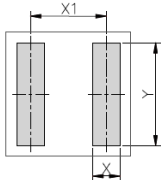
Dimensions

Symbol	Millimeters	Inches
A	4.2±0.2	0.165±0.008
B	4.2±0.2	0.165±0.008
C	4.0±0.3	0.157±0.008
D	0.5±0.1	0.020±0.004

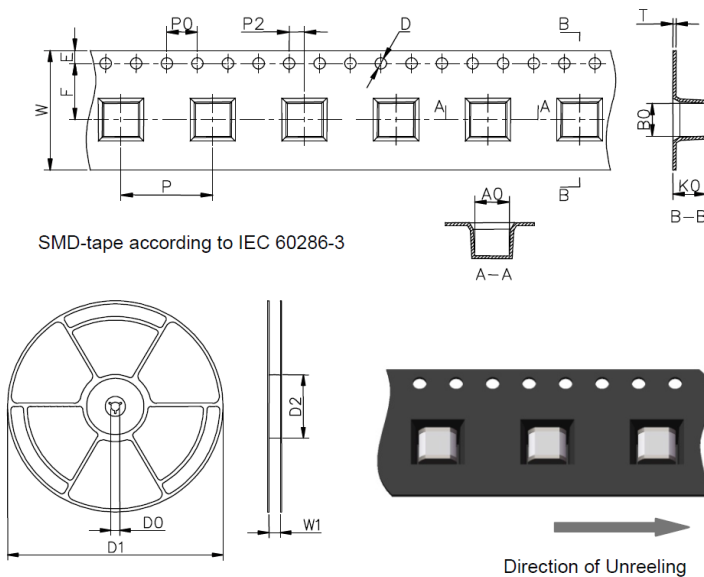


Recommended Pad Layout

Symbol	Millimeters	Inches
X	1.3	0.051
X1	3.6	0.142
Y	5.0	0.197



Taping and Reel Specifications



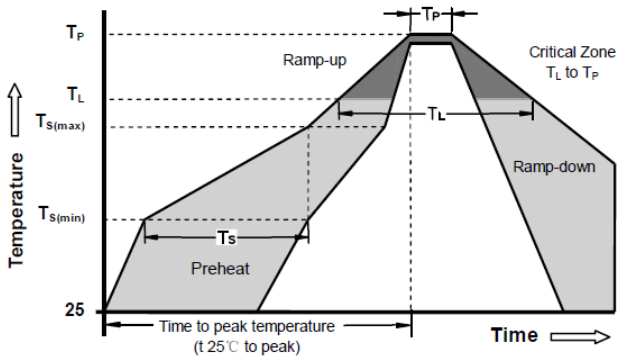
Symbol	Millimeters	Inches
W	16±0.3	0.630±0.012
A0	4.5±0.1	0.177±0.004
B0	4.3±0.1	0.17±0.004
K0	4.4±0.1	0.173±0.004
P	12±0.1	0.472±0.004
F	7.5±0.1	0.295±0.004
E	1.75±0.1	0.069±0.004
D	1.5+0.1/-0.0	0.059+0.004/-0.0
P0	4±0.1	0.157±0.004
P2	2±0.1	0.079±0.004
T	0.4±0.1	0.016±0.004
D0	13.3±0.15	0.524±0.006
D1	330±2	12.992±0.079
D2	100+1/-2	3.937+0.039/-0.079
W1	16.5±0.4	0.65±0.016

Packaging Quantity

- 1,000 PCS per reel (13")
- 3 reels per inner box
- 3,000 PCS per inner box

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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 Seconds
Average ramp up rate (Liquids 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) (Liquids)	217°C
	- Time (min to max) (t_s)	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