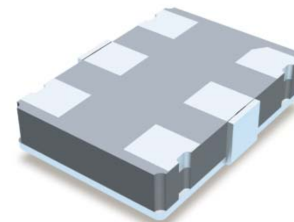
Features

- Small Size Design EIA7050 7.0×5.0×1.5mm
- Current Handling Capability 1KA@ 8/20 μ s by one-way
- Fast Response and Long Service Life
- Moisture sensitivity level: Level 1
- High integrated, ultra-compact and slim leadless ceramic
- package for surface installation

Exterior

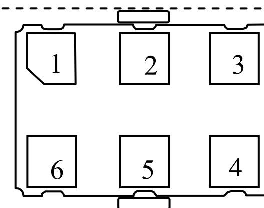


SMD

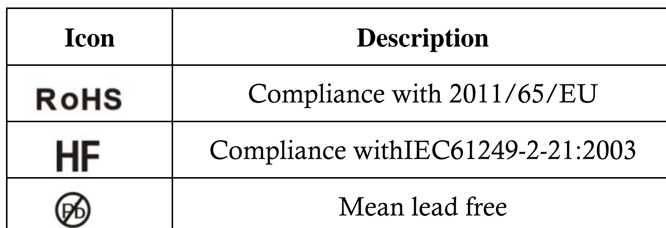
Application information

- Communication equipment

Package (Top View)

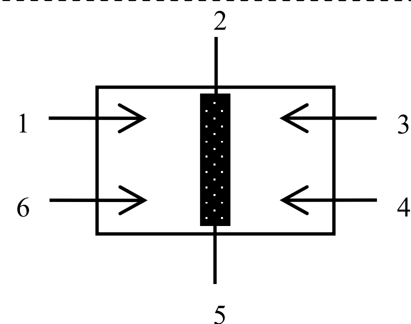


Agency Approvals



Icon	Description
RoHS	Compliance with 2011/65/EU
HF	Compliance withIEC61249-2-21:2003
Pb	Mean lead free

Schematic Symbol



Electrical Parameter

DC Breakdown Voltage 1)2) 3)	100V/s	>150	V
Impulse Spark-over Voltage3)	At 1kV/ μ s	for 99 % of measured values ≤850	V
	At 1kV/ μ s	Typical values of distribution ≤750	V
Impulse Discharge Voltage 3)	10/700 μ s	6,000	V
Impulse Discharge Current 3)	Pin1、3、4、6-Pin25 8/20μs	1,000	A
	Pin1346-Pin25 8/20 μ s	3.5	KA
Arc Voltage3)	At 1A	~10	V
Insulation Resistance3)	DC=100V	≥1	GΩ
Capacitance at 1MHz3)	VDC=0.5V	≤2.0	pF
Weight		~0.27	g
Operating And Storage Temperature		-40-90	℃
Marking		Without	

1) At delivery AQL 0.65 level II ISO 2859
2) In ionized mode
3) Terms and waveforms in accordance with ITU-T Rec. K. 12; IEC 61643-21 , Currents through each end-Pin（1、3、4、6）to the ground Pin (2、5) .

Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications

Part Numbering System

B GA 150 FR
(1) (2) (3) (4)

(1) Bencent
(2) "GA" means "GDT Array"
(3)Minimum DC Breakdown Voltage is 150V
(4) "FR: Four" means that four gas discharge tubes Integrate to one GDT Array.

Product Characteristics

Lead Material	Tungsten/copper
Body Material	Ceramics
Terminal Finish	Tin Plated

Environmental Reliability Characteristics

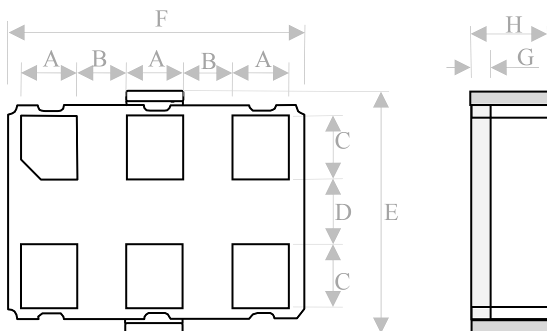
Testing items	Technical standards
High Temperature Storage Test	Temperature: 90℃ Time:2H
Low Temperature Storage Test	Temperature: -40℃ Time:2H
Vibration	Frequency: 10-500Hz Amplitude: 0.15mm Time: 45min
Resistance of soldering heat	Temperature: 260±5℃ Time of dip soldering: 10s, 1time

Note: Up-screen program can be specified by customer's request via contacting Bencent service

Solderability test

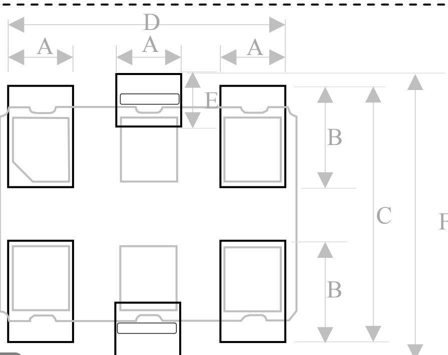
Solderability	Solder Pot Temperature:	245℃±5℃
	Solder Dwell Time:	4-6 seconds

Product Dimensions



REF	mm	inch
A	1.3	0.051
B	1.2±0.2	0.047±0.008
C	1.8	0.071
D	1.2±0.2	0.047±0.008
E	5.8±0.3	0.228±0.012
F	7.0±0.3	0.276±0.012
G	0.3±0.2	0.0118±0.008
H	1.5±0.2	0.059±0.008

Recommended Soldering Pad



REF	mm	inch
A	1.5	0.059
B	2.4	0.094
C	6	0.236
D	6.5	0.256
E	1.1	0.043
F	6.6	0.260

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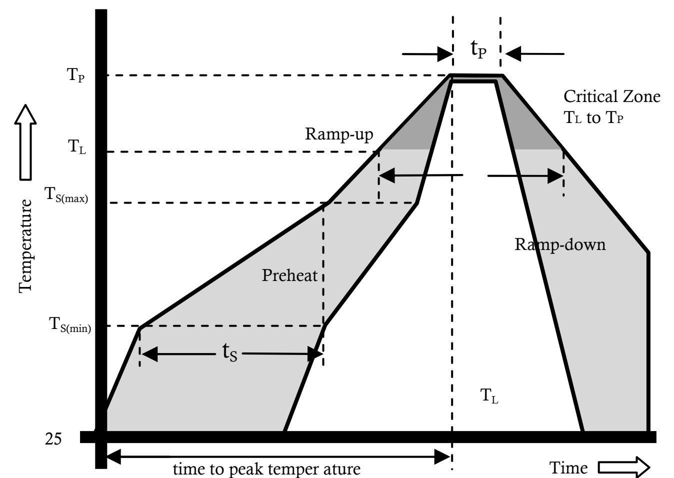
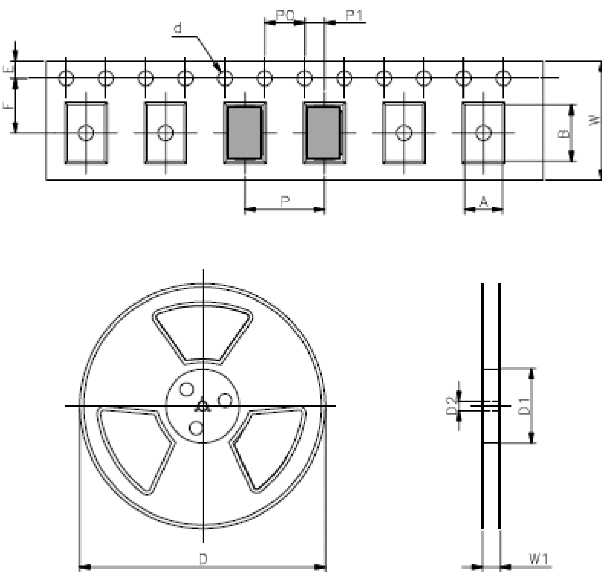
Reflow Profile

Reflow Condition		Pb-Free assembly
Pre Heat	Temperature Min	150°C
	Temperature Max	200°C
	Time （min to max）	60 – 180 secs
Average ramp up rate（Liquids）Tamp（T_L） to peal		3°C/second max
T_S(max) to T_L - Ramp-up Rate		3°C/second max
Reflow	- Temperature (T_L) (Liquids)	217°C
	- Temperature (T_L)	60 – 150 seconds
Peak Temperature (T_P)		260+0/-5 °C
Time within 5°C of actual peak Temperature (tp)		10 seconds max
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_P)		8 minutes Max.
Do not exceed		260°C



Package Reel Information



REF	mm	inch
A	5.5±0.3	0.217±0.012
B	7.9±0.3	0.311±0.012
d	Φ1.5±0.2	Φ0.059±0.008
P0	4.0±0.2	0.157±0.008
P1	2.0±0.2	0.079±0.008
P	8.0±0.2	0.315±0.008
E	1.75±0.2	0.069±0.008
F	7.5±0.2	0.295±0.008
W	16.0±0.2	0.630±0.008
D	Φ330.0	Φ13.0
D1	Φ50Min	Φ1.97Min
D2	Φ13±0.5	0.512±0.020
W1	16.8±2.0	0.661±0.079

Outline	Reel (PCS)	Per Carton (PCS)	Reel Diameter (mm)	Carton Size(mm)		
				L	W	H
TAPING	2,000	32,000	330	360	360	385

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