HUAAN 华兴安电子 HUAAN LIMITED

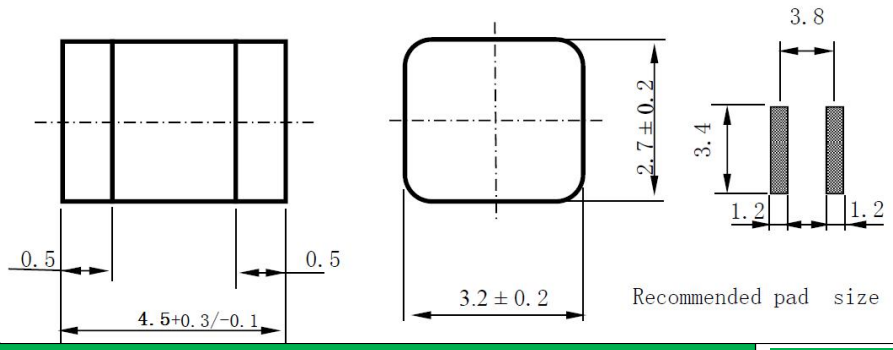
4.5*3.2*2.7mm

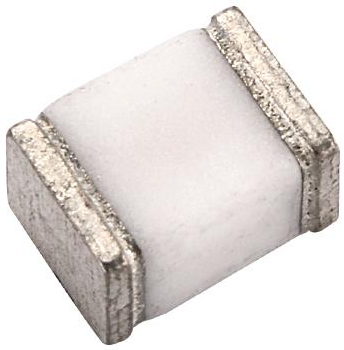
2-Electrode Gas Discharge Tubes

1KA

Surface Mount

1：Dimension(mm)





2:Main Applications

- •Transient Voltage Surge Suppression(TVSS)
- •Cable Telephone Product
- •Modems/Cable Modems
- •Broadband/CATV/Coaxial Protectors
- •Communication Lines

3:Features

- •100% Lead-Free(RoHs Compliant)
- •Non-Radioactive
- •Low capacitance ≤0.5pF
- •Small size :4.5*3.2*2.7mm
- •Safety certification: File number: E505240

4 Electrical Characteristics

Part Number	DC Spark-over Voltage@	Impulse Spark-over Voltage	Insulation Resistance	Impulse discharge current	Impulse Discharge Current 300hits	Impulse Withstanding Voltage 10hits	AC discharge current 50Hz,1s	UL Certificate	Delivery Time
	100V/S	@1KV/μs	GΩ	8/20μs	8/20μs	10/700μs	10times	UL497B	Days
HA2R3-75SMD	75V ±25%	<600V	>1GΩ	1KA	100A	4000V	1A	E505240	7days
HA2R3-90SMD	90V ±20%	<600V	>1GΩ	1KA	100A	4000V	1A	E505240	7days
HA2R3-140SMD	140V ±20%	<600V	>1GΩ	1KA	100A	4000V	1A	E505240	7days
HA2R3-150SMD	150V ±20%	<600V	>1GΩ	1KA	100A	4000V	1A	E505240	7days
HA2R3-200SMD	200V ±20%	<700V	>1GΩ	1KA	100A	4000V	1A	E505240	7days
HA2R3-230SMD	230V ±20%	<700V	>1GΩ	1KA	100A	4000V	1A	E505240	7days
HA2R3-250SMD	250V ±20%	<800V	>1GΩ	1KA	100A	4000V	1A	E505240	7days
HA2R3-300SMD	300V ±20%	<900V	>1GΩ	1KA	100A	4000V	1A	E505240	7days
HA2R3-350SMD	350V ±20%	≤ 1000V	>1GΩ	1KA	100A	4000V	1A	E505240	7days
HA2R3-400SMD	400V ±20%	≤ 1000V	>1GΩ	1KA	100A	4000V	1A	E505240	7days
HA2R3-420SMD	420V ±20%	≤ 1000V	>1GΩ	1KA	100A	4000V	1A	E505240	7days
HA2R3-470SMD	470V ±20%	≤ 1200V	>1GΩ	1KA	100A	4000V	1A	E505240	7days
HA2R3-500SMD	500V ±20%	≤ 1200V	>1GΩ	1KA	100A	4000V	1A	E505240	7days
HA2R3-600SMD	600V ±20%	≤ 1400V	>1GΩ	1KA	100A	4000V	1A	E505240	7days

4 Electrical Characteristics Continue

Part Number	Impulse Spark-over Voltage	Arc voltage at 1 A	Glow to arc transition current	Glow voltage	Weight
	@100V/μs	V	A	V	g
HA2R3-75SMD	<400V	~ 8V	< 0.2A	~ 50V	0.2g
HA2R3-90SMD	<500V	~ 8V	< 0.2A	~ 50V	0.2g
HA2R3-140SMD	<500V	~ 8V	< 0.2A	~ 50V	0.2g
HA2R3-150SMD	<500V	~ 8V	< 0.2A	~ 50V	0.2g
HA2R3-200SMD	<500V	~ 8V	< 0.2A	~ 50V	0.2g
HA2R3-230SMD	<650V	~ 8V	< 0.4A	~ 55V	0.2g
HA2R3-250SMD	<650V	~ 8V	< 0.4A	~ 55V	0.2g
HA2R3-300SMD	<700V	~ 10V	< 0.4A	~ 55V	0.2g
HA2R3-350SMD	<750V	~ 22V	< 0.2A	~ 55V	0.2g
HA2R3-400SMD	<800V	~ 10V	< 0.2A	~ 55V	0.2g
HA2R3-420SMD	<800V	~ 10V	< 0.4A	~ 55V	0.2g
HA2R3-470SMD	<900V	~ 20V	< 0.2A	~ 150V	0.2g
HA2R3-500SMD	<950V	~ 20V	< 0.2A	~ 150V	0.2g
HA2R3-600SMD	<1100V	~ 20V	< 0.2A	~ 150V	0.2g

1:At delivery AQL 0.65 leave Ⅱ Military Standard 105 E
2:In ionized mode
3:Test according to ITU-T Rec.k.12
According to the demand of customer, can do all kinds of voltage

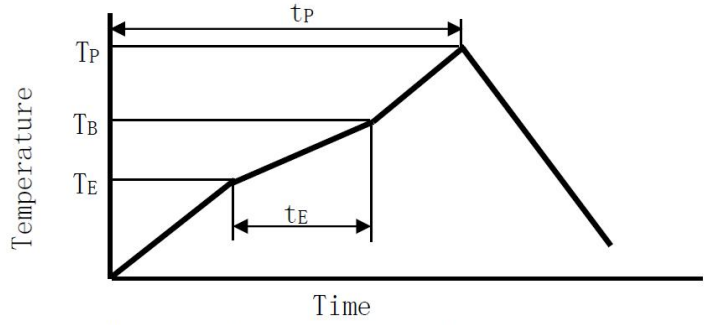
Environmental resistance

Storage temperature:	-40℃---+90℃
Operating temperature:	-40℃---+90℃
Body Material:	Sn Plating

Example Part Number: HA2R3-90SMD

HA	=	**HUAAN**
2	=	**2 Electrode device**
R	=	**Gas Discharge Tube**
3	=	**3mm Diameter**
90	=	**90V**
SMD	=	**Surface Mounted Device**

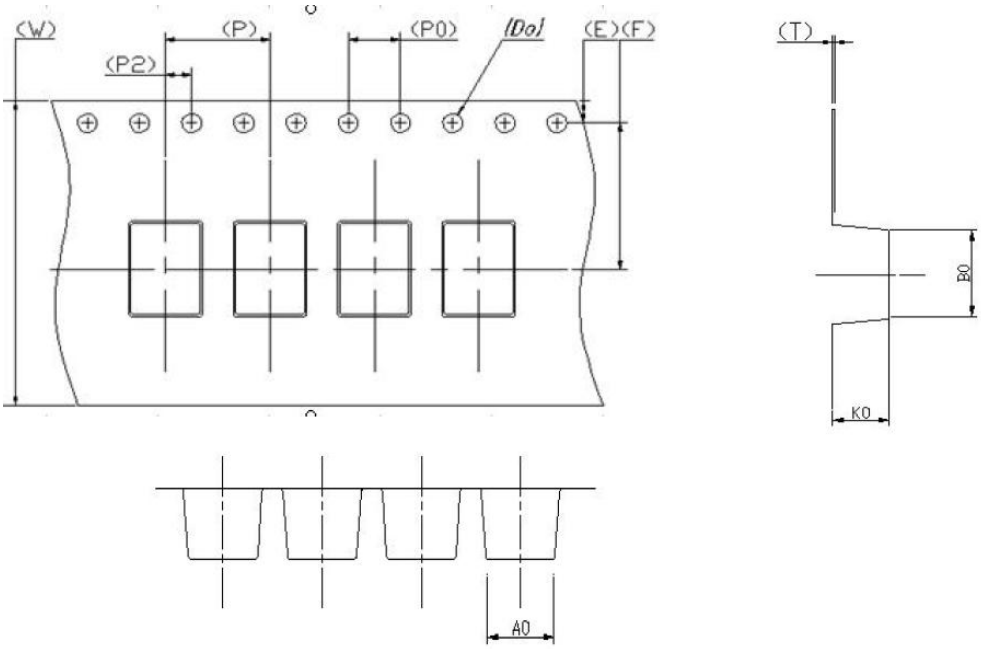
Reflow Soldering Curve



TE max=180℃ tE max=60s(at TE max)
TB max=220℃

Tape Specification and Reel Dimensions

Tape



Symbol	Dimensions(mm)
W	16.0mm ±0.3
E	1.75mm ±0.1
F	7.5mm ±0.1
T	0.35mm ±0.05
P	8.0mm ±0.1
P0	4.0mm ±0.1
P2	2.0mm ±0.1
D0	Φ1.5mm ±0.1
A0	3.4mm ±0.1
K0	3.0mm ±0.1
B0	5.0mm ±0.1

Packaging Quantity

Part Number	Quantity	
	Per Reel	Per Carton
HA2R3-xxxSMD Series	2000PCS	16000PCS