

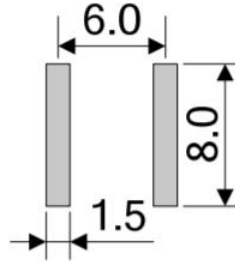
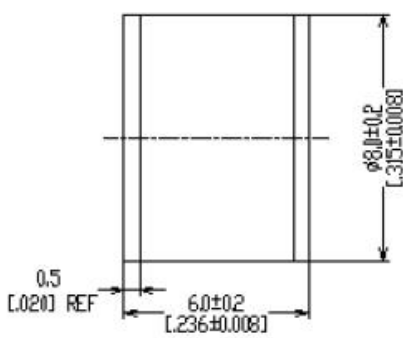
2-Electrode Gas Discharge Tubes

10KA

No Lead Wire



1: Dimension(mm)



Recommended Pad Size



2: Main Applications

- PCI Cards protection
- Telephone/Fax/Modem protection
- single line protection
- ADSL/XDSL Splitter, Power Supply
- Surge Protection Device/Surge Protector

3: Features

- 100% Lead-Free (RoHS Compliant)
- Non-Radioactive
- Low capacitance: ≤1pF
- Small size : Φ8x6(mm)
- Safety certification: File number: E505240

4 Electrical Characteristics

Part Number	DC Spark-over Voltage	Impulse Spark-over Voltage	Impulse Spark-over Voltage	Insulation Resistance	Impulse discharge current	Impulse Life	AC discharge current	Delivery time	UL Certificate
	@100V/S	@100V/μs	@1KV/μs	GΩ	10 Times	10x1000μs	10times	days	UL497B
HA2R8-75M	75V ±20%	≤500V	≤ 600V	>1GΩ	10KA	100A	10A	12days	E505240
HA2R8-90M	90V ±20%	≤500V	≤ 600V	>1GΩ	10KA	100A	10A	12days	E505240
HA2R8-140M	140V±20%	≤500V	≤ 600V	>1GΩ	10KA	100A	10A	12days	E505240
HA2R8-150M	150V±20%	≤500V	≤ 600V	>1GΩ	10KA	100A	10A	12days	E505240
HA2R8-200M	200V±20%	≤600V	≤ 700V	>1GΩ	10KA	100A	10A	12days	E505240
HA2R8-230M	230V±20%	≤600V	≤ 700V	>1GΩ	10KA	100A	10A	12days	E505240
HA2R8-250M	250V±20%	≤600V	≤ 700V	>1GΩ	10KA	100A	10A	12days	E505240
HA2R8-260M	260V±20%	≤700V	≤ 800V	>1GΩ	10KA	100A	10A	12days	E505240
HA2R8-300M	300V±20%	≤800V	≤ 900V	>1GΩ	10KA	100A	10A	12days	E505240
HA2R8-350M	350V±20%	≤900V	≤ 1000V	>1GΩ	10KA	100A	10A	12days	E505240
HA2R8-400M	400V±20%	≤900V	≤ 1000V	>1GΩ	10KA	100A	10A	12days	E505240
HA2R8-420M	420V±20%	≤900V	≤ 1000V	>1GΩ	10KA	100A	10A	12days	E505240
HA2R8-470M	470V±20%	≤1100V	≤ 1200V	>1GΩ	10KA	100A	10A	12days	E505240
HA2R8-500M	500V±20%	≤1100V	≤ 1200V	>1GΩ	10KA	100A	10A	12days	E505240
HA2R8-550M	550V±20%	≤1300V	≤ 1400V	>1GΩ	10KA	100A	10A	12days	E505240
HA2R8-600M	600V±20%	≤1300V	≤1400V	>1GΩ	10KA	100A	10A	12days	E505240

4 Electrical Characteristics

10KA

Part Number	DC Spark-over Voltage	Impulse Spark-over Voltage	Insulation Resistance	Impulse discharge current 8/20μs	Capacitance 1MHz	AC discharge current 50Hz, 1s	Delivery time	UL Certificate
	@100V/S	@1KV/μs	GΩ	10 Times	pF	10times	days	UL1449
HA2R8-800M	800V ±20%	≤1400V	>1GΩ	10KA	≤1pF	10A	12days	---
HA2R8-1000M	1000V±20%	≤ 1700V	>1GΩ	10KA	≤1pF	10A	12days	---

4 Electrical Characteristics

Continue

Part Number	DC Holdover Voltage	On-State Voltage	Impulse discharge current 8/20μs	Peak Current @10/350μs	Weight
	Per ITU K.12 (<150ms)	Nominal @ 1A	1time	1time	g
HA2R8-75M	<52V	20V	12KA	1KA	~1.5g
HA2R8-90M	<52V	20V	12KA	1KA	~1.5g
HA2R8-140M	<80V	20V	12KA	1KA	~1.5g
HA2R8-150M	<80V	20V	12KA	1KA	~1.5g
HA2R8-200M	<135V	20V	12KA	1KA	~1.5g
HA2R8-230M	<135V	20V	12KA	1KA	~1.5g
HA2R8-250M	<135V	20V	12KA	1KA	~1.5g
HA2R8-260M	<135V	20V	12KA	1KA	~1.5g
HA2R8-300M	<150V	20V	12KA	1KA	~1.5g
HA2R8-350M	<150V	20V	12KA	1KA	~1.5g
HA2R8-400M	<150V	20V	12KA	1KA	~1.5g
HA2R8-420M	<150V	20V	12KA	1KA	~1.5g
HA2R8-470M	<150V	20V	12KA	1KA	~1.5g
HA2R8-500M	<150V	20V	12KA	1KA	~1.5g
HA2R8-550M	<150V	20V	12KA	1KA	~1.5g
HA2R8-600M	<150V	20V	12KA	1KA	~1.5g
HA2R8-800M	<150V	20V	12KA	1KA	~1.5g
HA2R8-1000M	<150V	20V	12KA	1KA	~1.5g

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

Environmental resistance

Storage temperature:	-40℃---+90℃
Operating temperature:	-40℃---+90℃
Electrode:	Tin Plated

Example Part Number: HA2R8-90M

HA	=	HUAAN
2	=	2 Electrode device
R	=	Gas Discharge Tube
8	=	8mm Diameter
90	=	90V
M	=	No Lead Wire

Tape Specification and Reel Dimensions

Symbol	Dimensions(mm)
W	16.0mm ±0.3
E	1.75mm ±0.1
F	7.5mm ±0.1
T	0.50mm ±0.05
P	12.0mm ±0.1
P0	4.0mm ±0.1
P2	2.0mm ±0.1
D0	Φ1.5mm ±0.1
A0	8.60mm ±0.1
K0	8.50mm ±0.1
B0	6.4mm ±0.1

Packaging Quantity

Part Number	Quantity	
	Per Tray	Per Carton
HA2R8-xxxM Series	500PCS	4000PCS