

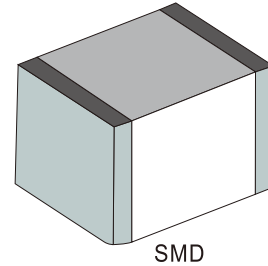
# Type KW2S2R Series/ 貼片氣體放電管 Surface mounted Gas Discharge Tube

**RoHS**

## Features

- Small Size Design EIA 1206 3.2X1.6X1.6mm
- Current Handling Capability 1KA @ 8/20us
- Low Capacitance and Insertion Loss
- Fast Response and Long Service Life
- Reliable to Protect Electrostatic Surge
- Moisture sensitivity level:Level 1

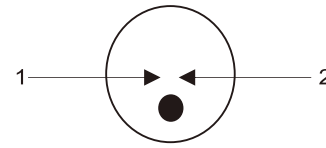
## Exterior



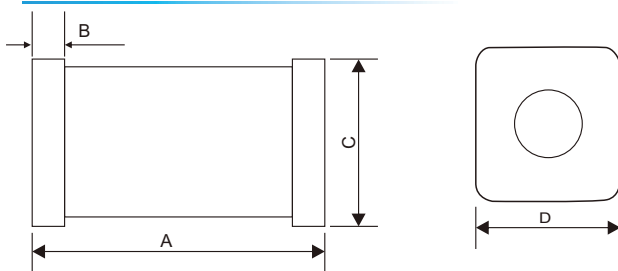
## Agency Approvals

Icon	Description
<b>ROHS</b>	Compliance with 2011/65/EU
<b>HF</b>	Compliance with IEC61249-2-21:2003
	Mean Lead free
	Compliance with UL497B,Certificated E324754

## Schematic Symbol

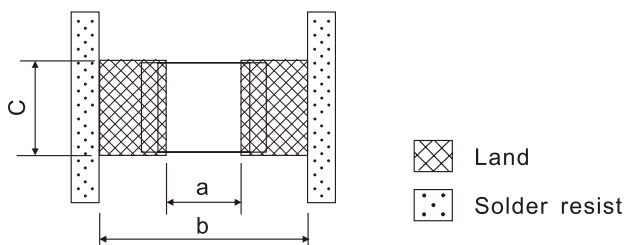


## Dimensions(Unit:mm)



REF	min
A	3.2±0.2
B	0.25±0.1
C	1.6±0.3
D	1.6±0.3

## Recommended Soldering Pad



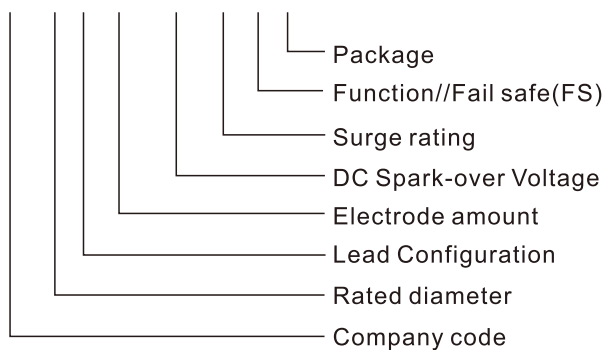
Soldering Moder	Dimensions(mm)		
	a	b	c
Reflow Soldering	1.8~2.0	3.8~5.5	1.2~2.2
Flow Soldering	1.8~2.0	2.4~3.6	1.2~1.6

# Type KW2S2R Series/ 貼片氣體放電管

## Surface mounted Gas Discharge Tube

### Part Numbering system

**KW 2 S 2R XXX L O S**



### Electrical Specifications

Catalog Number 料號	DC Spark-Over Voltage 標稱直流擊穿電壓 100V/s Vs(V)	Impulse Spark-Over 衝擊擊穿電壓 1KV/μs Vis(V) Max.	Nom Impulse Discharge Current 耐衝擊電流 10x700μs kV	Nom Impulse Discharge Current 耐衝擊電流 8x20μs(kA)	Insulation Resistance 絕緣電阻		Capacitance 電容值 C 1kHz<6V pF Max.
					Min. MΩ	DC V	
KW2S2R90	90±30%	500	2.0	1.0	100	50	1.0
KW2S2R140	140±30%	600	2.0	1.0	100	50	1.0
KW2S2R200	200±20%	600	2.0	1.0	100	100	1.0
KW2S2R300	300±20%	800	2.0	1.0	100	100	1.0
KW2S2R400	400±20%	900	2.0	1.0	100	100	1.0
KW2S2R500	500±20%	1000	2.0	1.0	100	250	1.0

### Solderability test

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

### Product Characteristics

Lead Material	Copper or iron nickel alloy
Body Material	Ceramics
Terminal Finish	100% Matte-Tin Plated
Weight	0.035g

### Temperature Range

Operating temp range : -55°C to +125°C

Storage temp range : -40°C to +85°C

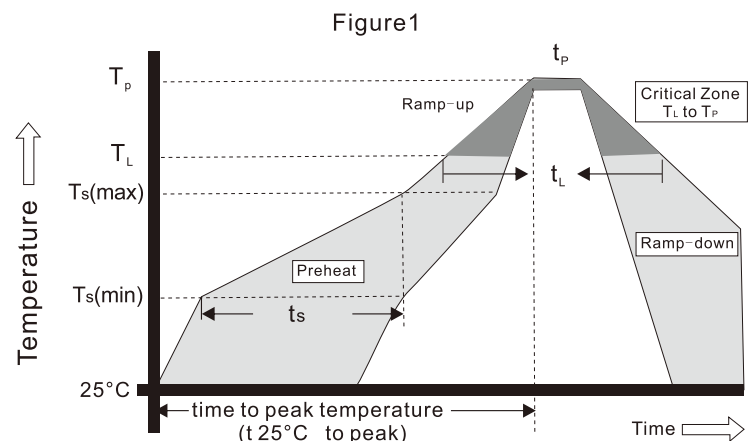
## Type KW2S2R Series/ 貼片氣體放電管 Surface mounted Gas Discharge Tube

### Environmental Reliability Characteristics

Testing items	Technical standards
High Temperature Storage Test	Temperature:85°C Time:2H
Low Temperature Storage Test	Temperature:-40°C Time:2H
Vibration	Frequency:100-500Hz Amplitude:0.15mm Time:45mins
Resistance of soldering heat	Temperature:260±5°C Time of dip soldering: 10s, 1 time

### Soldering Parameters - Reflow Soldering (Surface Mount Devices)

Reflow Condition		Pb – Free assembly
Heat Pre	Temperature Min	150°C
	Temperature Max	200°C
	Time (Min to Max)	60 – 180 secs
Average ramp up rate (Liquidus Temp (TL) to peak)		3°C/second max
Ts(max) to TL - Ramp-up Rate		5°C/second max
Reflow	- Temperature (TL) (Liquidus)	217°C
	- Temperature (tL)	60 – 150 seconds
Peak Temperature (TP)		260+0/-5 °C
Time within 5°C of actual peak Temperature (tp)		8 – 20 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (TP)		8 minutes Max.
Do not exceed		260°C



### Packaging

Part Number	Description	Quantity
KW2S2R	2500PCS Per Reel, 2500PCS in box, 25000PCS Outer box	25000PCS