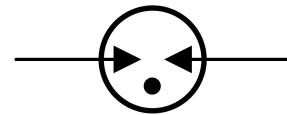


## Features

- Stable breakdown voltage
- High insulation resistance
- High current rating
- Low capacitance ( $\leq 0.5\text{pF}$ )
- Stable performance over life
- Large absorbing transient current capability
- Fast response time
- RoHS compliant
- Standard Size: 3.2mm\*2.5mm\*2.5mm
- Meets MSL level 1, per J-STD-020
- Storage and operating temperature:  $-40^{\circ}\text{C} \sim +90^{\circ}\text{C}$

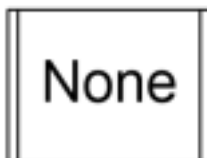
GDT Graphical Symbol



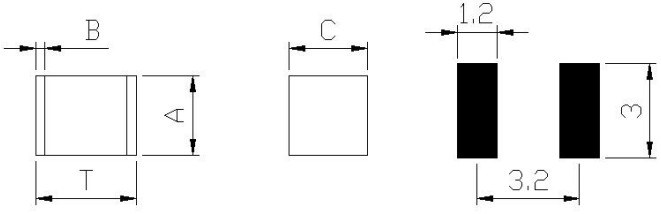
## Applications

- Repeaters, Modems
- Subscriber protection
- Telephone Interface, Line cards
- Data communication equipment
- Line test equipment
- Branch exchange
- Subscriber protection
- Alarm system
- Tuner
- Antenna protection

## Part Number Code and Marking



## Dimensions

Recommended Pad Layout		Symbol	Dimensions(mm)
	T	3.2±0.3	
	A	2.5±0.3	
	B	0.3±0.1	
	C	2.5±0.3	

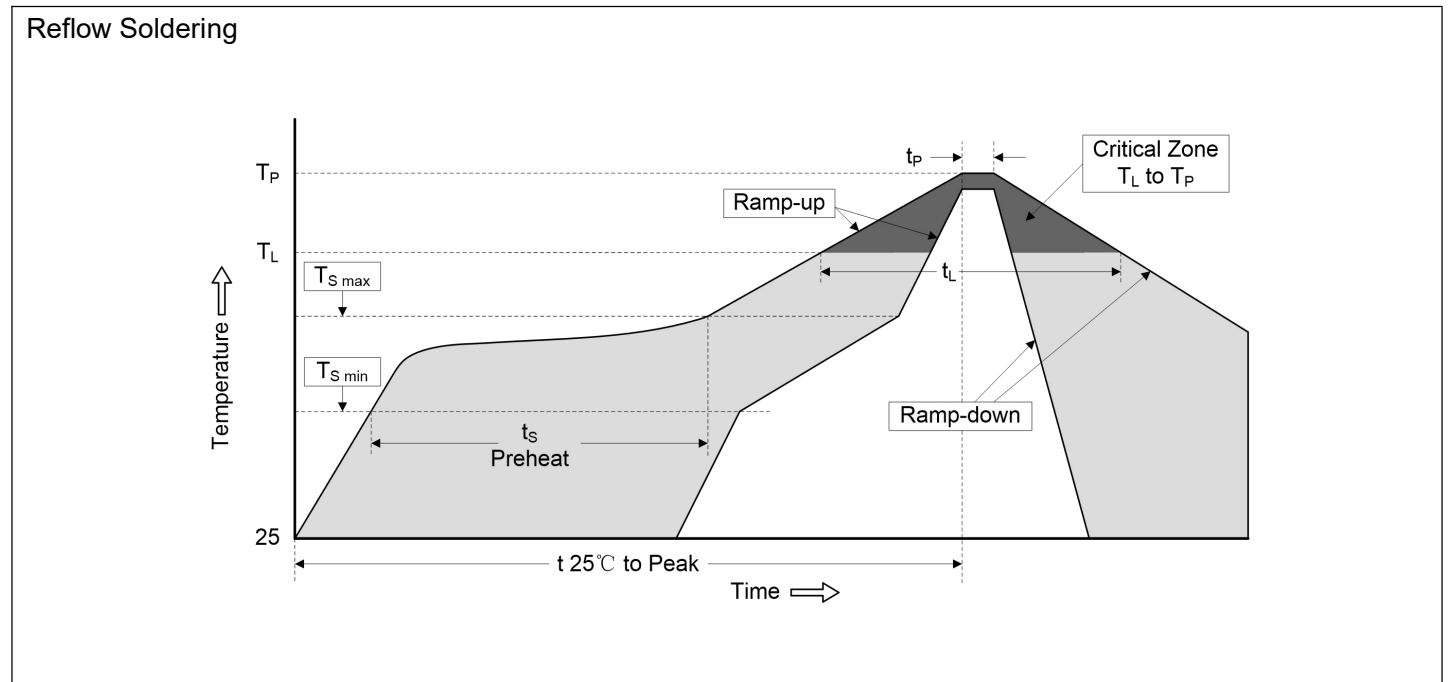
## Electrical Characteristics (T<sub>A</sub>=25°C)

Part Number	Marking	DC Spark-over Voltage	Maximum Impulse Spark-over Voltage	Nominal Impulse Discharge Current	Minimum Insulation Resistance		Maximum Capacitance	Impulse Withstanding Voltage Capacity
		100V/s	1000V/μs	8/20μs, 10 times	Test Voltage	GΩ	1MHz	10/700μs, 10 times
K3225-090-LF	None	90V±30%	700V	1KA	50VDC	1	0.5pF	6kV
K3225-150-LF	None	150V±30%	750V	1KA	100VDC	1	0.5pF	6kV
K3225-200-LF	None	200V±30%	800V	1KA	100VDC	1	0.5pF	6kV
K3225-300-LF	None	300V±30%	850V	1KA	100VDC	1	0.5pF	6kV
K3225-400-LF	None	400V±30%	950V	1KA	100VDC	1	0.5pF	6kV

## Test Methods and Results

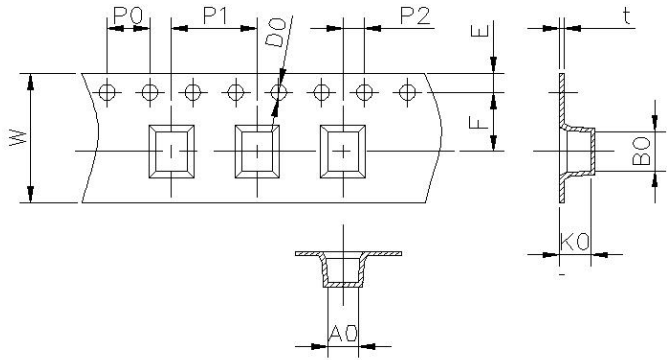
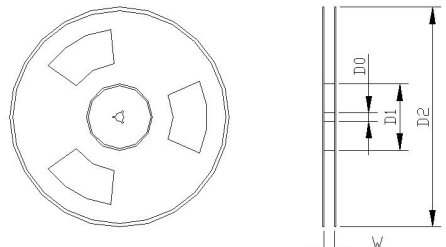
Items	Test Method	Standard
DC Spark-over Voltage	measured with voltage ramp dv/dt=100V/s.	To meet the specified value
Maximum Impulse Spark-over Voltage	measured with voltage ramp dv/dt=1000V/μs.	
Impulse Discharge Current	applied between two electrodes, 5 positive and 5 negative surges, with 3 minutes interval time,	
Insulation Resistance	measured between two electrodes.	
Capacitance	measured between two electrodes. Test frequency: 1MHz	
Impulse Withstanding Voltage	10/700μs surge that can be applied to the Gas Tube, 5 positive and 5 negative surges, with 1 minute interval time.	

## Soldering Parameters



Profile Feature	Pb-Free Assembly
Average ramp-up rate ( $T_L$ to $T_P$ )	3°C/second max.
Preheat -Temperature Min ( $T_{S\ min}$ ) -Temperature Max ( $T_{S\ max}$ ) -Time (min to max) ( $t_s$ )	150°C 200°C 60-180 seconds
$T_{S\ max}$ to $T_L$ -Ramp-up Rate	3°C/second max.
Time maintained above: -Temperature ( $T_L$ ) -Time ( $t_L$ )	217°C 60-150 seconds
Peak Temperature ( $T_P$ )	260°C
Time within 5°C of actual Peak Temperature ( $t_p$ )	20-40 seconds
Ramp-down Rate	6°C/second max.
Time 25°C to Peak Temperature	8 minutes max.

### Packaging Specification

Tape	Symbol	Dimension (mm)	
	W	8.0±0.2	
	P0	4.0±0.1	
	P1	8.0±0.2	
	P2	2.0±0.1	
	D0	1.55±0.1	
	E	1.75±0.1	
	F	3.5±0.1	
	A0	2.8±0.1	
	K0	2.8±0.1	
	B0	3.5±0.1	
	t0	0.3±0.1	
	<p data-bbox="76 1061 159 1097">Reel</p> 	D0	13.3±1.0
		D1	100.0±2.0
		D2	330.0±2.0
W		8.5±0.5	
Quantity: 2500pcs			