

LY42R090KS Data Sheet

Features

- Stable breakdown voltage.
- High insulation resistance.
- Low capacitance ($\leq 1\text{pF}$)
- Large absorbing transient current capability.
- Size: 4.2mm*4.0mm
- Storage and operating temperature: $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
- Meets MSL level 1, per J-STD-020

Applications

- Repeaters, Modems
- Telephone Interface, Line cards
- Data communication equipment
- Line test equipment

Part Number Code

LY42R 090 K S

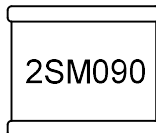
LY42R: Size Code, LY4 series, Two electrodes

090: DC Breakdown Voltage=90V@100V/s

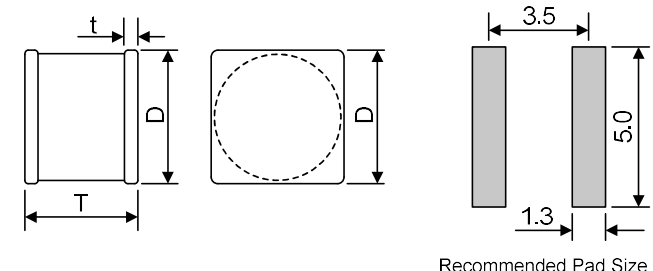
K: Impulse Discharge Current=3KA@8/20 μs

S: SMD Type

Marking



Dimensions

Item	Dimensions(mm)	
D	4.2±0.5	
T	4.0±0.4	
t	0.4±0.2	

Electrical Characteristics

Model Name	DC Breakdown Voltage	Maximum Impulse Breakdown Voltage	Impulse Discharge Current	Alternating Discharge Current	Impulse Life	Minimum Insulation Resistance	Maximum Capacitance
	100V/s	1000V/μs	8/20μs, 10 times	50Hz, 1s	10/1000μs, 100A	50VDC	1MHz
LY42R090KS	90V±20%	800V	3KA	3A	300 times	1GΩ	0.8pF

Electrical Ratings

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 $dv/dt=1000V/\mu s$.	
Impulse Discharge Current	applied between two electrodes, 5 positive and 5 negative surges, with 3 minutes interval time,	
Alternating Discharge Current	Rated RMS value of AC current at 50Hz, 1 sec. for 10 times with interval time 3 min.	
Insulation Resistance	measured between two electrodes.	
Capacitance	measured between two electrodes. Test frequency: 1MHz	

Reflow Soldering

