

Metallized Polypropylene Film Capacitor (High current pulse, Axial type) (GTO) Snubber Applications

FSE series

Overview

The FSE series is constructed of metallized polypropylene film and double sided metallized film, with flame-retardant plastic case or polyester tape wrapping filled with resin and terminals.



Applications

- Widely used in high voltage, high frequency circuit.
- GTO modules protection.

Features

- High ripple current
- Self-healing property
- Low losses
- High contact reliability
- Suitable for high frequency applications

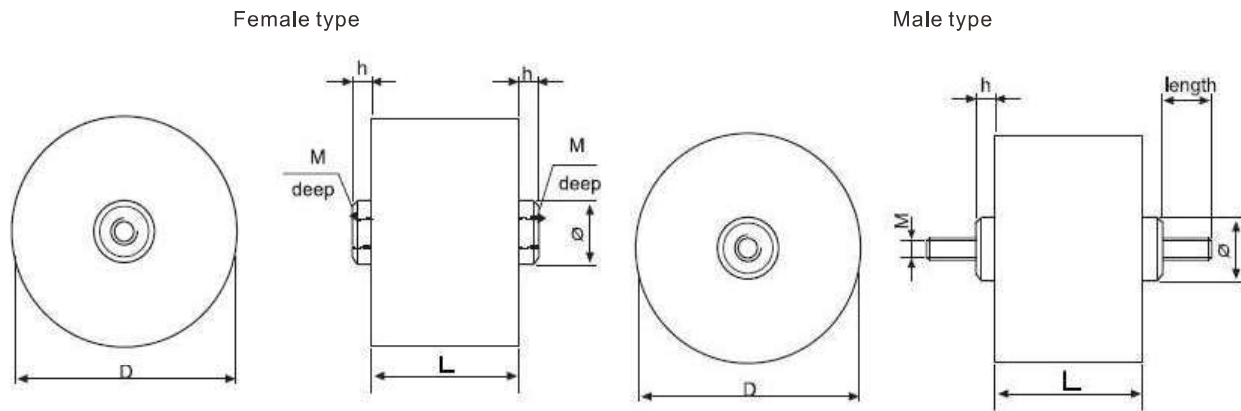
Specifications

Items	Characteristics
Application	Snubber GTO
Reference Standard	IEC 61071
Climatic Category	40/85/56 IEC 60068-1
Operating Temperature Range	-40 ~ +105°C(+85°C observing voltage must be de-rating at 1.35% per °C)
Rated Voltage	1000Vdc ~ 3000Vdc
Capacitance Range	0.5µF ~ 12µF
Capacitance Tolerance	±5% or ±10% at +25°C
Dissipation Factor (DF)	≤ 0.001 (0.1%) at 1kHz at +25°C
Test Voltage Between Terminals	1.5 x rated voltage for 10s (terminal to terminal)
Test Voltage Terminal to Case	3.0KVac 50 Hz for 10s at +25°C
Insulation Resistance	IR x C ≥ 50,000 Seconds at 100VDC 1 minute at +25°C
Life Expectancy	100,000 hours at Un @ Hot-Spot temperature T=+ 85°C
Protection	Flame retardant plastic case or polyester tape wrapping with epoxy resin fill
Installation	Any position
Packaging	Packed in cardboard boxes with protection for the terminals
RoHS Compliant	Compliant with the restricted substance requirements of Directive 2011/65/EU
Storage Conditions	Storage time: ≤ 24 months from the date marked on the label package Temperature and relative humidity should be -10°C ~ +40°C and not more than 75%RH. RH ≤ 85% for 30 days randomly distributed throughout the year
Humidity Test	Test conditions & performance:
	Temperature: +40°C ±2°C Relative humidity(RH) :93% ±2%
	Test duration : 56 days
	Capacitance change : ≤±5% DF change (Δtgδ):≤20 X 10 ⁻⁴ at 1KHz Insulation resistance: ≥50% of initial limit
Endurance Test	Test conditions & performance:
	Temperature: +85°C ±2°C Voltage applied:1.3 X V _R (d.c.)
	Test duration : 1000 hours
	Capacitance change : ≤±5% DF change (Δtgδ):≤20 X 10 ⁻⁴ at 1KHz Insulation resistance: ≥50% of initial limit

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■ Dimensions



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■ Technical data

Vdc	Cap	Dimensions		I _{rms}	Peak	ESR _{Typical}	R _{th}	dv/dt	output	Part Number
	Value	D	L	100KHz	Current	100KHz				
	μF	mm max	mm max	70°C A	A	mΩ				
1000	1.50	45.0	37	43	825	1.0	11	550	M6*8	FSE3KJ155037FN65
1000	3.00	56.0	40	55	1500	0.8	7.4	500	M6*8	FSE3KJ305040FN65
1000	4.00	65.0	40	65	2000	0.8	6	500	M6*8	FSE3KJ405040FN65
1000	5.00	72.0	40	70	2500	0.7	5	500	M8*8	FSE3KJ505040FN85
1000	6.00	78.0	40	80	3000	0.7	4.5	500	M8*8	FSE3KJ605040FN85
1000	7.00	84.0	40	85	3500	0.6	4	500	M8*8	FSE3KJ705040FN85
1000	8.00	75.0	50	85	3600	0.6	4	450	M8*8	FSE3KJ805050FN85
1000	10.00	86.0	50	88	4500	0.7	3.5	450	M8*8	FSE3KJ106050FN85
1000	12.00	86.0	50	95	5400	0.7	3.5	450	M8*8	FSE3KJ126050FN85
1200	1.00	45.0	37	40	700	1.2	11.5	700	M6*8	FSE3BJ105037FN65
1200	2.00	52.0	40	45	1200	1.0	8.5	600	M6*8	FSE3BJ205040FN65
1200	3.00	62.0	40	60	1800	0.8	6.5	600	M6*8	FSE3BJ305040FN65
1200	4.00	72.0	40	70	2400	0.7	5	600	M8*8	FSE3BJ405040FN85
1200	5.00	80.0	40	80	3000	0.7	4.5	600	M8*8	FSE3BJ505040FN85
1200	6.00	86.0	40	85	3600	0.7	4	600	M8*8	FSE3BJ605040FN85
1200	8.00	86.0	50	90	4000	0.7	3.8	500	M8*8	FSE3BJ805050FN85
1200	10.00	86.0	50	95	5000	0.7	3.5	500	M8*8	FSE3BJ106050FN85
2000	0.50	45.0	37	35	600	1.5	12	1200	M6*8	FSE3DJ504037FN65
2000	1.00	56.0	40	50	1200	1.2	7.5	1200	M6*8	FSE3DJ105040FN65
2000	1.50	68.0	40	60	1800	1.0	5.5	1200	M6*8	FSE3DJ155040FN65
2000	2.00	78.0	40	75	2400	0.9	4.5	1200	M8*8	FSE3DJ205040FN85
2000	2.50	88.0	40	80	3000	0.8	4	1200	M8*8	FSE3DJ255040FN85
2000	3.00	82.0	50	80	2550	0.8	4	850	M8*8	FSE3DJ305050FN85
2000	4.00	86.0	50	85	3400	0.8	3.5	850	M8*8	FSE3DJ405050FN85
3000	0.68	50.0	50	35	816	2.5	12	1200	M6*8	FSE3FJ684037FN65
3000	0.75	52.0	50	45	900	2.0	7.5	1200	M6*8	FSE3FJ754050FN65
3000	1.00	60.0	50	50	1200	1.5	5.5	1200	M6*8	FSE3FJ105050FN65
3000	1.20	67.0	50	60	1440	1.4	4.5	1200	M8*8	FSE3FJ125050FN85
3000	1.50	73.0	50	65	1800	1.2	4	1200	M8*8	FSE3FJ155050FN85
3000	2.00	85.0	50	70	2400	1.0	4	1200	M8*8	FSE3FJ205050FN85
3000	2.50	93.0	50	85	3000	0.9	3.5	1200	M8*8	FSE3FJ255050FN85
3000	0.68	38.0	64	30	578	4.0	14.5	850	M6*8	FSE3FJ684064FN85
3000	1.00	45.0	64	40	850	3.0	8.5	850	M6*8	FSE3FJ105064FN85
3000	1.50	55.0	64	55	1275	2.0	6.5	850	M6*8	FSE3FJ155064FN85
3000	2.00	63.0	64	60	1700	1.5	5.5	850	M8*8	FSE3FJ205064FN85
3000	2.50	70.0	64	70	2125	1.4	5	850	M8*8	FSE3FJ255064FN85
3000	3.00	76.0	64	85	2550	1.2	4	850	M8*8	FSE3FJ305064FN85

Snubber Capacitors

* Customized products are available by request, contact us for more details.
 * Specification are subject to change, please refer to approved data sheets.

