14DXXXK-GB Series

ROHS

Composite Surge Protection Device(GMOV)

Description

The composite surge protector GMOV is a type of surge protector that combines Switch type protective components and Voltage limiting protective components. GMOV achieves high performance as a long life protector with low capacitance and, most importantly, very low leakage. GMOV is ideally suited for any number of AC and DC power applications where a high level of performance is required over time, improving the overall stability of the system.

Features

- Wide operating voltages ranging from 50Vrms to 420Vrms(AC)
- Low leakage
- Fast response time
- High energy absorption capability
- High surge current handling capability
- Low clamping voltages and no follow current
- Low capacitance values, providing digital switching circuitry protection
- High insulation resistance

Applicable

- AC Power Protection
- DC Power Protection
- Surge protection in consumer electronics
- Surge protection in industrial electronics
- Surge protection in electronic home appliances
- Relay and electromagnetic valve surge absorption

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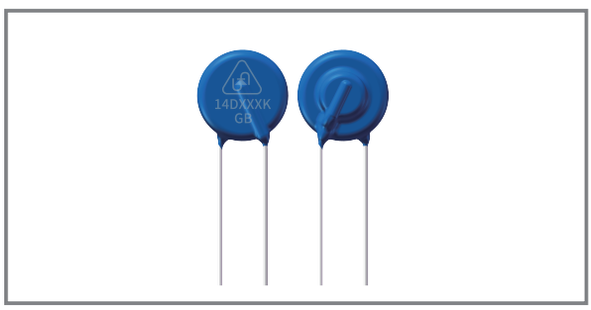
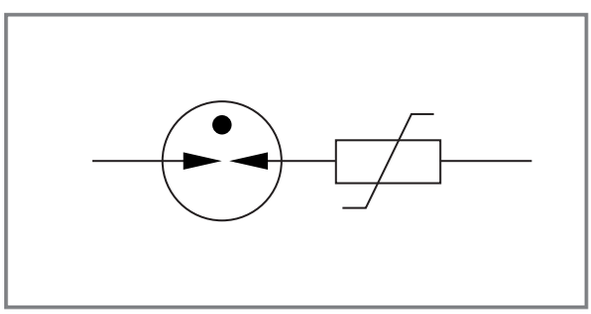


Circuit Diagram



General Characteristics Definition

- Operating Temperature: -40℃~ +105℃
- Storage Temperature: -40℃~ +125℃
- Insulation Resistance: > 100MΩ
- Coating (Epoxy Resin): Flame-Retardant to UL 94V-0

Part Numbering

14	-	D	-	XXX	-	K	-	G	-	B
(1)		(2)		(3)		(4)		(5)		(6)

(1) Size(mm) : 14mm

(2) Type : D: Disk

(3) Varistor Voltage : 820(82*10^0=82V) , 471(47*10^1=470V)

(4) Tolerance : K±10%

(5) Model Name Abbreviation : G : GMOV

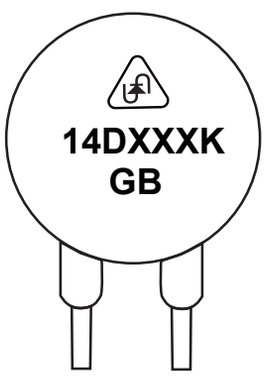
(6) Pin Type : B-Two Pins

Electrical Characteristics (@ 25℃ Unless Otherwise Specified)

Part Number	Maximum Continuous Operating Voltage MCOV		Maximum Leakage @MCOV	Typical Platform Voltage (1)	Typical Impulses Peak Voltage (2)	Withstanding Surge Current	Maximum Surge Current @1 time	Maximum Energy	Typical Capacitance (Reference)
	VAC (V)	VDC (V)	IR (μA)	Vp (V)	VI (V)	1.2/50us & 8/20us combination of wave, 6KV/3KA sub 0,90,180, 270 four phases,each phases of positive and negative 5 times Total	Imax （A）	10/1000μs （J）	@1KHz (pf)
14D820K-GB	50	65	<1	150	700	40	6000	27	5
14D121K-GB	75	100	＜1	220	700	40	6000	40	5
14D241K-GB	150	200	＜1	435	1200	40	6000	84	5
14D271K-GB	175	225	＜1	501	1200	40	6000	99	5
14D331K-GB	210	275	＜1	605	1200	40	6000	115	5
14D431K-GB	275	350	＜1	781	1200	40	6000	155	5
14D471K-GB	300	385	＜1	853	1200	40	6000	175	5
14D511K-GB	320	415	＜1	930	1200	40	6000	180	5
14D561K-GB	350	460	＜1	1012	1200	40	6000	185	5
14D621K-GB	385	505	＜1	1128	1200	40	6000	190	5
14D681K-GB	420	560	＜1	1320	1200	40	6000	200	5

Notes:
(1) Vp is defined as the reference data tested under the condition of IP=50A.
(2) VI defined as me asured with 10% of peak current in accordance with IEC 61051-1.

Part Marking



Marking	
Trademark	UN logo
Part No.	14DXXXK
G	GMOV
B	B-Two Pins

Packaging Information

Unit:Pcs

Dimension	Part No.	Bag	Small Carton	Carton
14DXXXK-GB	820K to 681K	500	3000	6000

Package Dimensions Unit: mm

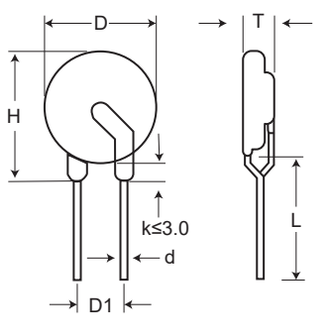


TABLE1	
Symbol	Dimension
H(max.)	21.0
L(min.)	20.0
D(max.)	16.5
D1(±0.8)	7.5
T(max.)	TABLE2
d(±0.05)	0.8

TABLE2	
Model	T(max.)
820K	7.5
121K	7.5
241K	8.0
271K	8.0
331K	8.0
431K	8.5
471K	8.5
511K	8.5
561K	9.0
621K	9.5
681K	9.5

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