



Eaton's MOV & GDT integrated devices offer longer life overvoltage protection



Eaton's Bussmann™ series of MOVGTs are radial led overvoltage protection devices that feature an integrated Metal Oxide Varistor (MOV) and Gas Discharge Tube (GDT) in series as a drop-in replacement to basic radial MOVs.

Product description

Eaton Bussmann™ series of MOVGTs are radial led overvoltage protection devices that feature an integrated Metal Oxide Varistor (MOV) and Gas Discharge Tube (GDT) in series as a drop-in replacement to basic radial MOVs. They are offered in disc sizes ranging from 7 mm up to 20 mm and MCOV values from 70 V to 600 V, suitable for Vac circuit voltages from 50 V_{RMS} to 560 V_{RMS}.

The MOV and GDT combination provides higher surge current withstand capabilities and longer life compared to standard MOVs. This is achieved by coordinating and arranging the MOV and GDT voltages such that the GDT isolates the MOV from small transients that are negligible to the overall system but can unnecessarily age the MOV. However, when subjected to large transients, the GDT activates and the MOV properly clamps the damaging voltage, providing the necessary protection.

Features and benefits

- MOV and GDT combination technology for longer life overvoltage protection
- Four different footprint options
- High reliability
- Optimizes protection needs, footprint, and cost
- UL 1449 certification with higher surge current ratings
- Leverages the best features of two commonly used overvoltage protection technologies



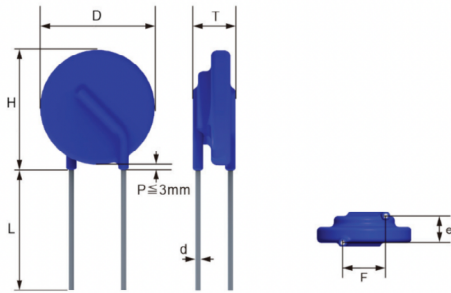
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Product specifications

Family	Disc size (mm)	Recommended MCOV range (Vac)	Platform voltage range ($V_{1000 V_{1/2}}$)	Maximum energy 10/1000 μ s (J)	Withstanding surge current 1.2/50-8/20 μ s (40 events)	MOV withstanding surge current 8/20 μ s (A) (1 time)	Capacitance (pf)
MOVGT07	7	55-560	150-1320	10-64	2 kV / 1 kA	1750	5
MOVGT10	10	55-560	150-1320	17-100	4 kV / 2 kA	3500	5
MOVGT14	14	55-560	150-1320	27-210	6 kV / 3 kA	6000	5
MOVGT20	20	55-560	150-1320	56-420	10 kV / 5 kA	10000	5

Dimensions- mm

Drawing not to scale



Circuit diagram



Table 1

Dimension	MOVGT07	MOVGT10	MOVGT14	MOVGT20
H (maximum)	10	15	20	25
L (minimum)	20	20	20	20
D (maximum)	9	13	16	23
F	5 \pm 1	7.5 \pm 0.8	7.5 \pm 0.8	10 \pm 1
T	Table 2	Table 2	Table 2	Table 2
e (\pm 1.0)	Table 2	Table 2	Table 2	Table 2
d (\pm 0.05)	0.6	0.8	0.8	1

Table 2

MOV Voltage	T (maximum)	e	MOV Voltage	T (maximum)	e
82	7.5	3.93	330	8.5	4.83
100	7.5	4.14	360	8.5	5
120	7.5	4.36	390	9	5.17
150	8	4.7	430	9	5.39
180	8	4	470	9	5.61
200	8	4.11	510	9	5.83
220	8	4.22	560	9	6.11
240	8	4.33	620	10	6.44
270	8	4.5	680	10	6.78
300	8.5	4.67	750	10	7.17

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