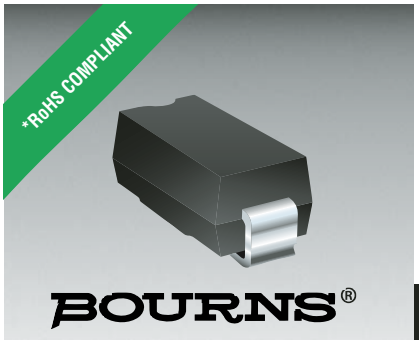


Features

- Formerly FulTec brand
- Extremely low capacitance
- Very high bandwidth
- Small package, minimal PCB area
- RoHS compliant*

Applications

- GR-1089
- ITU K.20 and K.21
- ADSL2+ and VDSL2 linecards
- LAN, WAN equipment

FVC Series Voltage Control Devices

Voltage Control

Bourns® voltage control devices are used with high-speed series protectors to protect sensitive circuits from electrical disturbances caused by lightning-induced surges, inductive-coupled spikes, and AC power cross conditions. The unique structure and characteristics of the device are used to create an overvoltage protection device with precise and repeatable turn-on characteristics with low voltage overshoot and high surge current capabilities.

Specifications

Part Number	Surge Rating	Electrical Characteristics							
	I_{PP} (A)	V_{DRM} (V)	V_S (V)	V_T (V)	I_{DRM} (µA)	I_S (mA)	I_T (A)	I_H (mA)	C_O (pF)
FVC2300	4	190	260	3	5	400	1	150	6
FVC3100	4	275	350	3	5	400	1	150	6

I_{PP} (peak pulse current) - maximum rated peak impulse current with 1.2/50 µs waveform

V_{DRM} (peak off-state voltage) - maximum voltage that can be applied while maintaining off state measured at I_{DRM}

V_S (switching voltage) - maximum voltage prior to switching to on-state measured at 100 V/µs

V_T (on-state voltage) - maximum voltage measured at rated on-state current

I_{DRM} (leakage current) - maximum peak off-state current measured at V_{DRM}

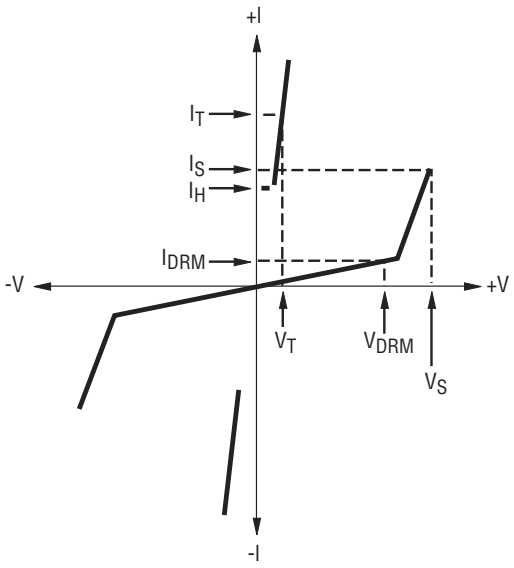
I_S (switching current) - maximum current required to switch to on state

I_T (on-state current) - maximum rated continuous on-state current

I_H (holding current) - minimum current required to maintain on state

C_O (off-state capacitance) - typical off-state capacitance measured at 1 MHz with a 2 V bias

Typical Performance Characteristics



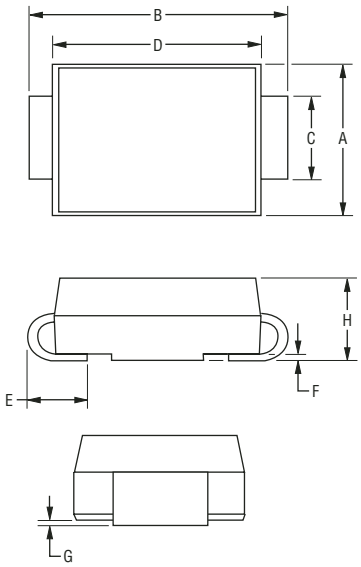
General Notes:

- All measurements are at an ambient temperature of 25 °C. I_{PP} applies to -40 °C through +85 °C.
- I_{PP} is a repetitive surge rating and is designed to be maintained for the life of the product.
- The devices are bidirectional. All electrical parameters and surge ratings apply to forward and reverse polarities.
- Special voltage (V_S and V_{DRM}) and holding current (I_H) requirements are available upon request.

*RoHS Directive 2002/95/EC Jan 27 2003 including Annex.

Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications

Product Dimensions



Dim.	Minimum	Maximum
A	2.29 (0.090)	3.00 (0.118)
B	4.50 (0.177)	5.40 (0.213)
C	1.25 (0.050)	1.65 (0.065)
D	3.90 (0.154)	4.65 (0.183)
E	0.76 (0.030)	1.52 (0.060)
F	0.15 (0.006)	0.30 (0.012)
G	—	0.20 (0.008)
H	1.95 (0.077)	2.24 (0.088)

DIMENSIONS: MM (INCHES)

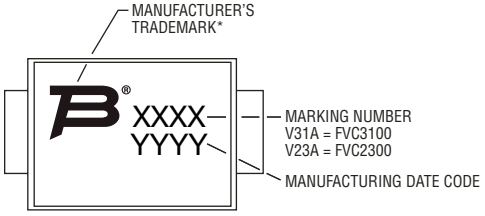
How to Order

FVC3100 - BK

Part Number
- FVC2300
- FVC3100

Packaging Indicator
BK = Packaged in tape and reel (1500 pieces per reel)

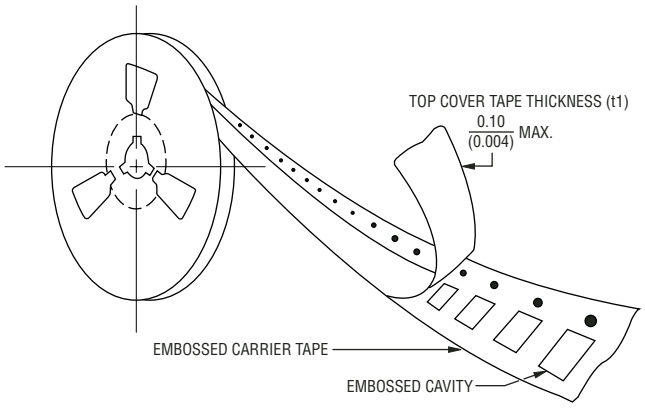
Typical Part Marking

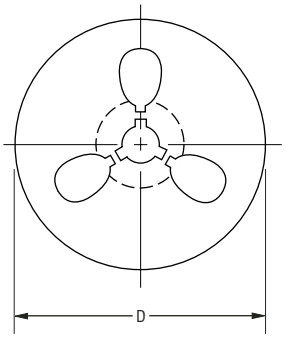


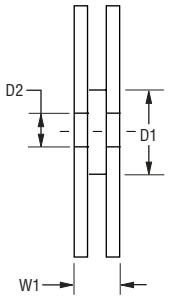
*TRANSITION FROM FULTEC TRADEMARK TO BOURNS TRADEMARK IN 2009.

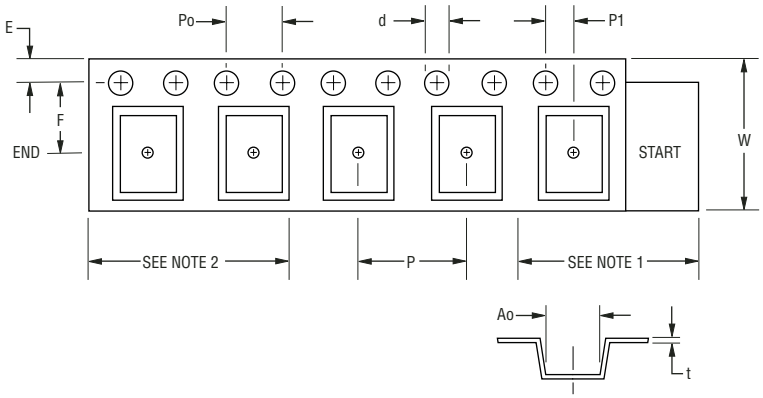
Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications

Packaging Specifications









Symbol	Dim.
A0	2.72± 0.10 (0.109 ± 0.004)
B0	5.25± 0.10 (0.210 ± 0.004)
d	1.55± 0.05 (0.061 ± 0.002)
D	330.0 (13.0)
D1	50.0 (1.969) MIN.
D2	13.50 ± 1.0 (0.531 ± 0.039)
E	1.75 ± 0.10 (0.069 ± 0.004)
F	5.50 ± 0.05 (0.217 ± 0.002)
K0	2.66 (0.105) MAX.
P	4.00 ± 0.10 (0.157 ± 0.004)
P0	4.00 ± 0.10 (0.157 ± 0.004)
P1	2.00 ± 0.05 (0.079 ± 0.002)
t	0.60 (0.024) MAX.
W	12.00 ± 0.30 (0.472 ± 0.012)
W1	18.4 (0.724) MAX.

DIMENSIONS: MM (INCHES)

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