



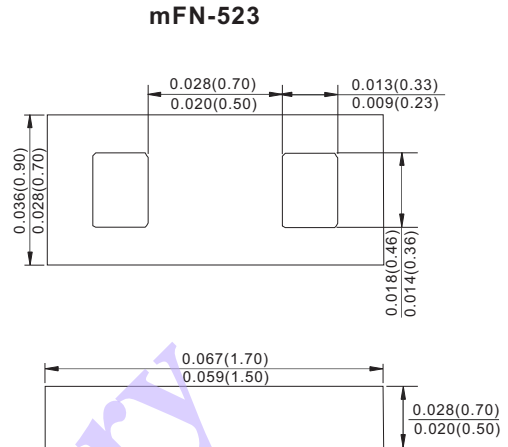
### Features

- Stand off voltage:11V
- Unidirectional
- Operating Tj max: 150 °C
- ESD-protection acc. IEC 61000-4-2  
±30 kV contact discharge  
±30 kV air discharge
- mini Flat No-Lead Package.
- Glass passivated chip junction.
- **Pb-Free package is available**  
RoHS product for packing code suffix "G"  
Halogen free product for packing code suffix "H"
- **Polarity:** Color band denotes cathode end

### Applications

- MP3 Players
- Digital Cameras and camcorders
- LCD Backlight
- Mobile Handsets
- PDA
- LED modules
- Digital TV and Set-top Boxes
- Other Portable Electronic Components

### Package outline



### Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : mFN-523
- Mounting Position : Any

### Maximum ratings (at T<sub>A</sub>=25°C unless otherwise noted)

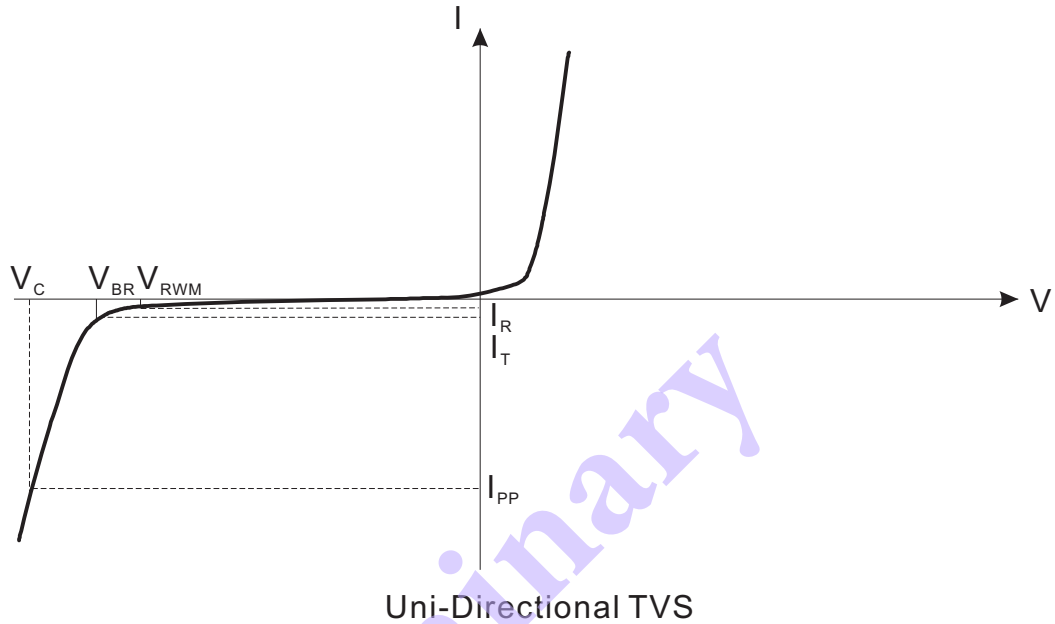
Rating	SYMBOL	VALUE	UNIT
Peak Pulse Power (tp=10/1000us Waveform)	P <sub>PP</sub>	90	W
Peak Pulse Current (tp=10/1000us Waveform)	I <sub>PP</sub>	5.0	A
ESD immunity (Contact discharge acc. IEC 61000-4-2) (Air discharge acc. IEC 61000-4-2)	V <sub>ESD</sub>	±30 ±30	kV kV
Operating temperature	T <sub>J</sub>	-55~+150	°C
Storage temperature	T <sub>STG</sub>	-55~+150	°C

### Electrical characteristics (at T<sub>A</sub>=25°C unless otherwise )

PARAMETER	TEST CONDITIONS	SYMBOL	MIN.	TYP.	MAX.	UNIT
Reverse Stand Off Voltage		V <sub>RWM</sub>	-	-	11.0	V
Reverse Leakage Current	V <sub>RWM</sub> = 11.0V	I <sub>R</sub>	-	-	1.0	uA
Reverse Breakdown Voltage	I <sub>T</sub> = 1.0mA	V <sub>BR</sub>	12.2	-	13.5	V
Clamping Voltage	I <sub>PP</sub> = 5.0 A , tp=10/1000us	V <sub>C</sub>	-	-	18.0	V
Junction Capacitance	V <sub>R</sub> = 0V , f = 1MHz	C <sub>J</sub>	-	220	-	pF

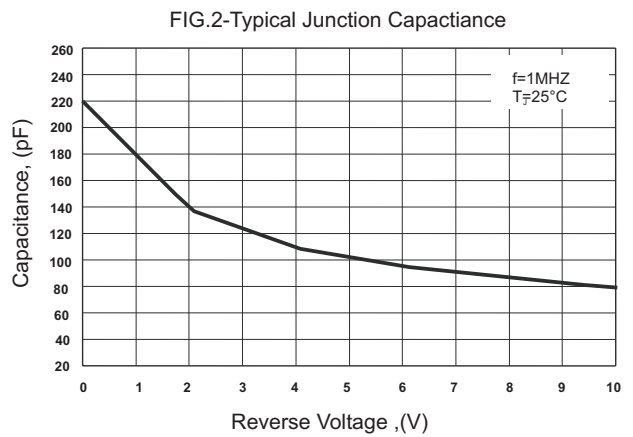
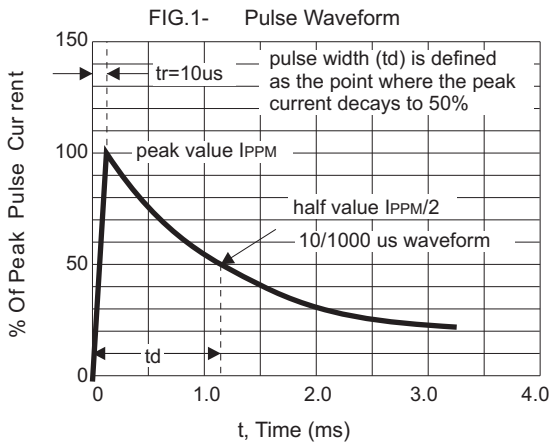


**Electrical characteristics** (at  $T_A=25^\circ\text{C}$  unless otherwise noted)



- $V_{BR}$  : Breakdown voltage @  $I_T$
- $I_T$  : Test Current
- $V_{RWM}$  : Reverse Stand Off Voltage
- $I_R$  : Maximum Reverse Leakage Current @  $V_{RWM}$
- $V_C$  : Clamping Voltage @  $I_{PP}$
- $I_{PP}$  : Maximum Reverse Peak Pulse Current

**Rating and characteristic curves**





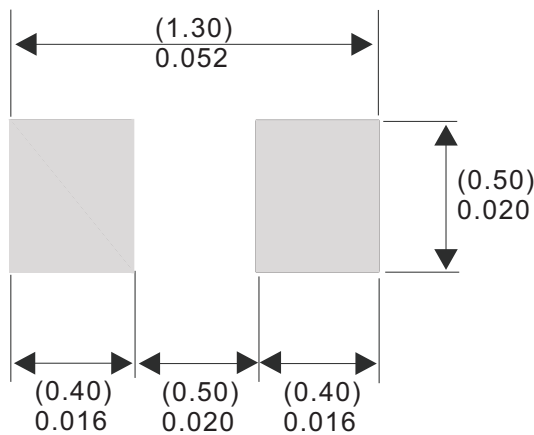
### Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

### Marking

Type number	Marking code
VGFM11A-FN5	X

### Suggested solder pad layout



Dimensions in inches and (millimeters)