

Protection in Portable Electronics Applications.

### FEATURES

- Transient protection for data lines to  
IEC 61000-4-2(ESD) :  $\pm 20\text{kV}$ (air/contact)  
IEC 61000-4-4(EFT) :  $2.5\text{kV}/50\text{A}$   
IEC 61000-4-5(Surge)  $3\text{A}(t_p=8/20\ \mu\text{s})$
- Small package for use in portable electronics.
- Suitable replacement for Multi-Layer Varistors in ESD protection applications.  
(\* Multi-Layer Varistors [0402 Size])
- Protects on I/O or power line.
- Low clamping voltage.
- Low leakage current.

### APPLICATIONS

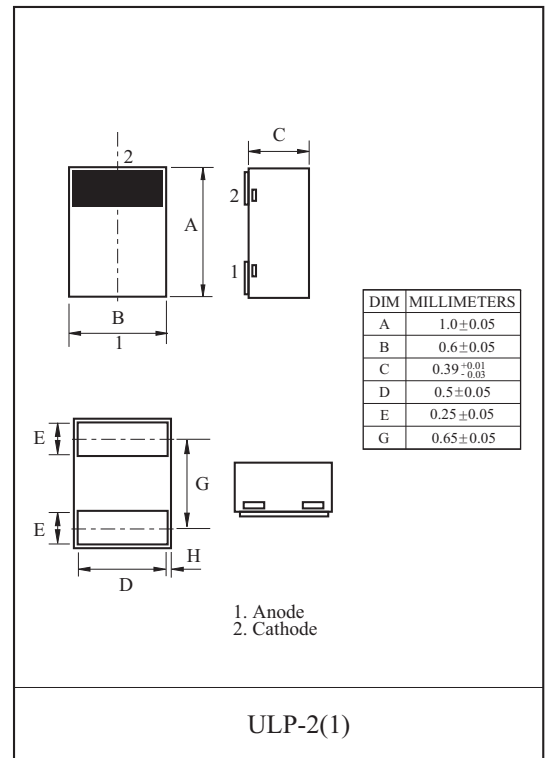
- USB 2.0, 10/100/1000 Ethernet, FireWire, DVI, HDMI, S-ATA
- Mobile Communication
- Consumer Products (STB, MP3, DVD, DSC...)
- LCD-Display, Camera
- Notebooks and desktop computers, peripherals

### MAXIMUM RATING (Ta=25 °C)

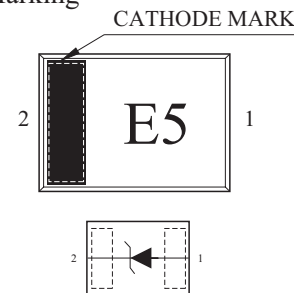
CHARACTERISTIC	SYMBOL	RATING	UNIT
Peak Pulse Current (tp=8/20 $\mu$ s)	I <sub>PP</sub>	3	A
Operating Temperature Range	T <sub>OP</sub>	-55 ~ 125	°C
Storage Temperature	T <sub>stg</sub>	-55 ~ 150	°C

### ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Stand-Off Voltage	V <sub>RWM</sub>	-	-	-	5.3	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>t</sub> =1mA	6	-	-	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>RWM</sub> =5.3V	-	-	100	nA
Clamping Voltage	V <sub>C</sub>	I <sub>PP</sub> =1A, tp=8/20 $\mu$ s	-	10	13	V
		I <sub>PP</sub> =3A, tp=8/20 $\mu$ s	-	12	15	
Junction Capacitance	C <sub>J</sub>	V <sub>R</sub> =0V, f=1MHz	-	0.4	0.6	pF

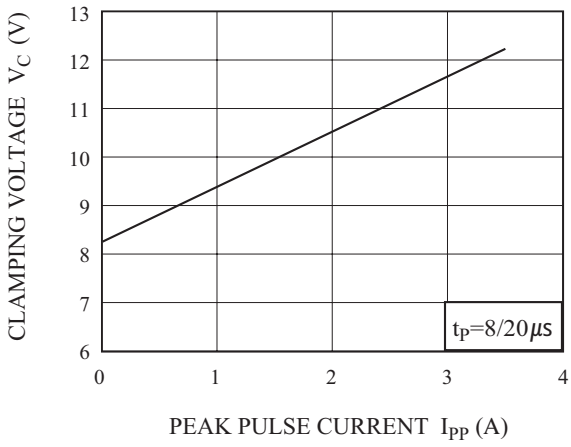


### Marking

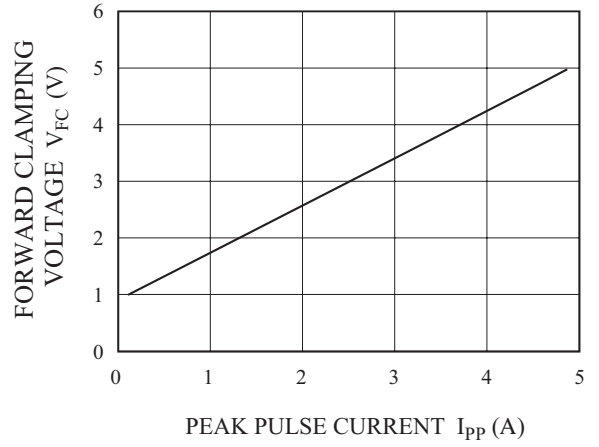


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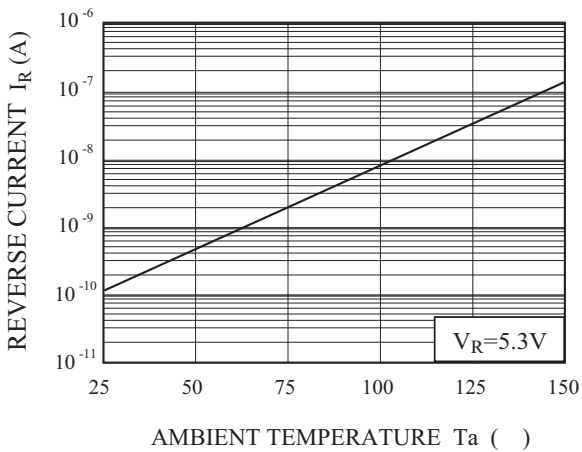
CLAMPING VOLTAGE



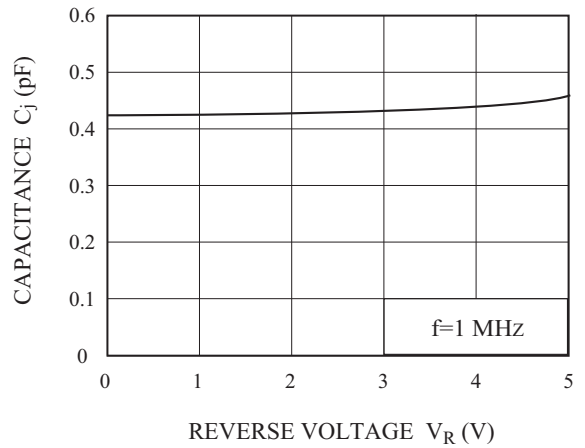
FORWARD CLAMPING VOLTAGE



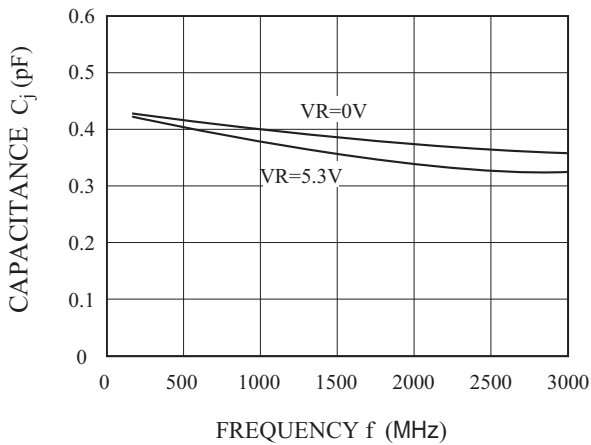
REVERSE CURRENT



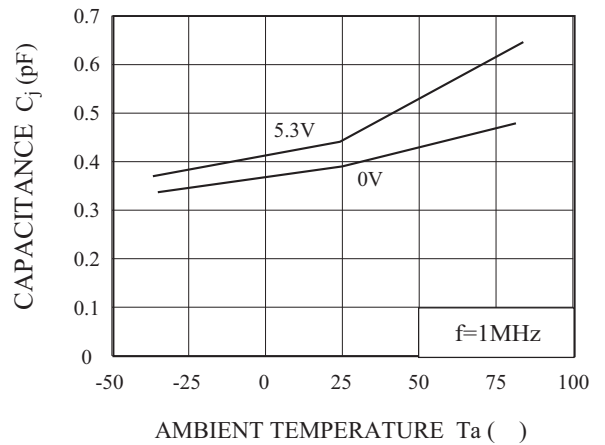
CAPACITANCE



LINE CAPACITANCE



LINE CAPACITANCE



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