

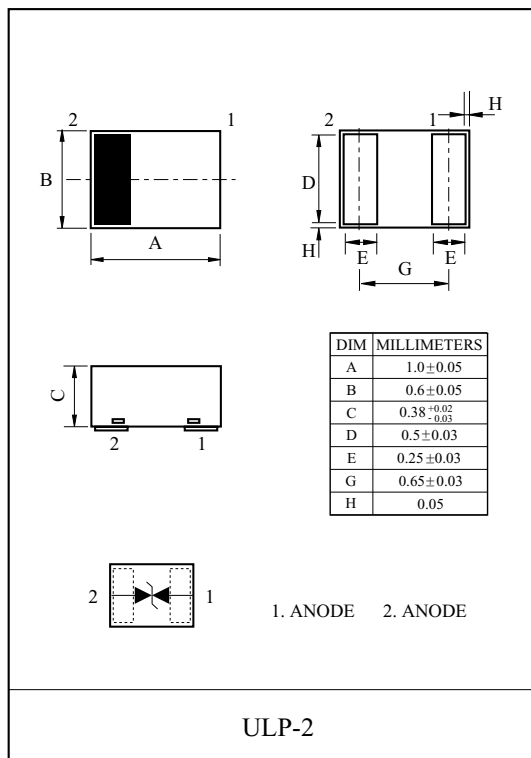
Protection in Portable Electronics Applications.

FEATURES

- Transient protection for data lines to
IEC 61000-4-2(ESD) : $\pm 8\text{kV}(\text{contact}), \pm 15\text{kV}(\text{Air})$
IEC 61000-4-4(EFT) : $2.5\text{kV}/50\text{A}$
IEC 61000-4-5(Surge) 4A($t_p=8/20\mu\text{s}$)
- Small package for use in portable electronics.
- Protects on I/O or power line.
- Low clamping voltage.
- Low leakage current.

APPLICATIONS

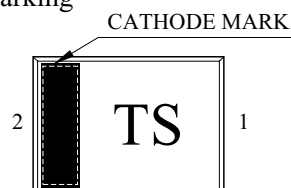
- USB 2.0, 10/100/1000 Ethernet, FireWire, DVI, HDMI, S-ATA
- Mobile Communication
- Consumer Products (STB, MP3, DVD, DSC...)
- LCD-Display, Camera
- Notebooks and desktop computers, peripherals



MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Peak Pulse Power ($t_p=8/20\mu\text{s}$)	P_{PK}	100	W
Peak Pulse Current ($t_p=8/20\mu\text{s}$)	I_{PP}	4	A
Junction Temperature	T_J	150	°C
Storage Temperature	T_{stg}	-55 ~ 150	°C

Marking

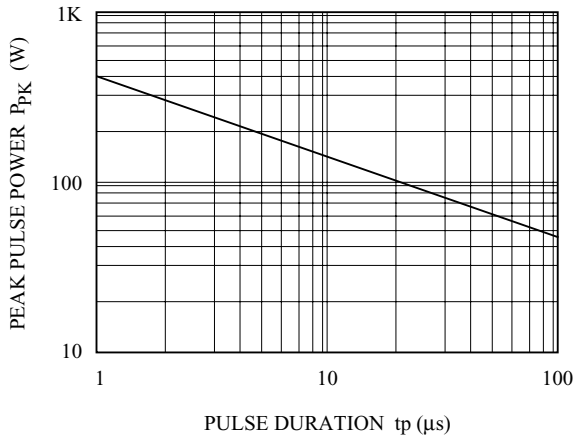


ELECTRICAL CHARACTERISTICS (Ta=25°C)

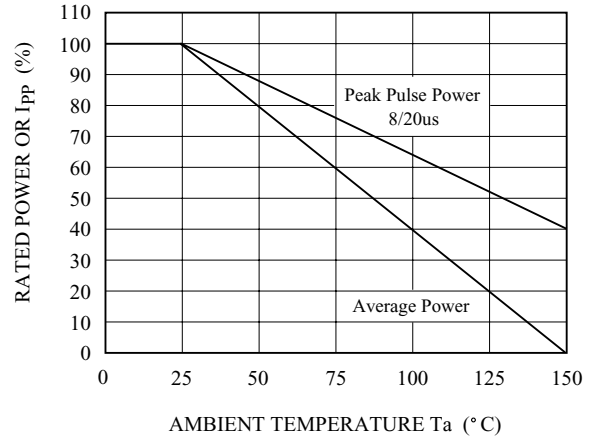
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Stand-Off Voltage	V_{RWM}	-	-	-	5	V
Reverse Breakdown Voltage	V_{BR}	$I_t=1\text{mA}$	7	8.8	10	V
Reverse Leakage Current	I_R	$V_{RWM}=5\text{V}$	-	10	100	nA
Clamping Voltage	V_C	$I_{PP}=1\text{A}, t_p=8/20\mu\text{s}$	-	13	20	V
		$I_{PP}=4\text{A}, t_p=8/20\mu\text{s}$	-	20	27	
Total Capacitance	C_J	$V_R=0\text{V}, f=1\text{MHz}$	-	0.45	0.6	pF

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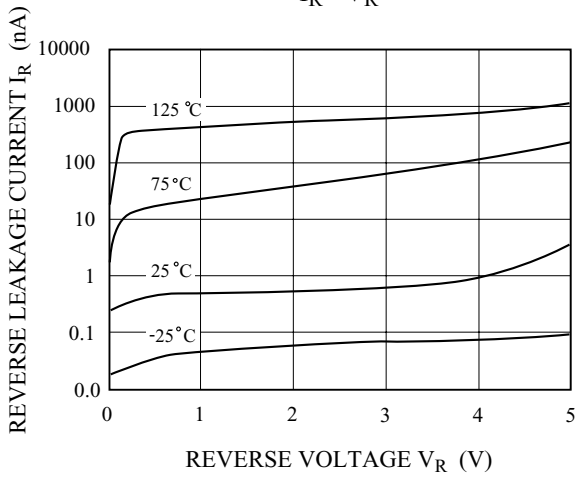
NON-REPETITIVE PEAK PULSE
POWER VS. PULSE TIME



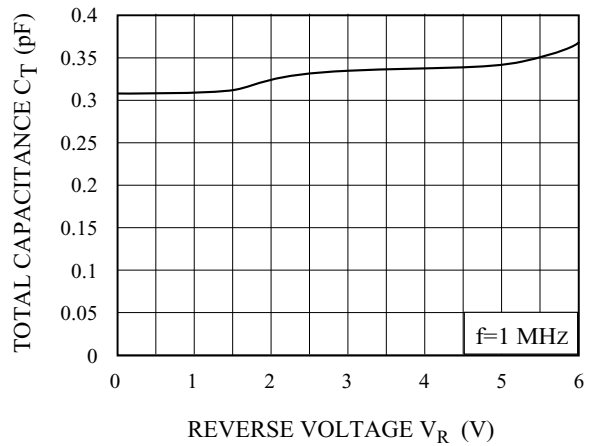
POWER DERATION CURVE



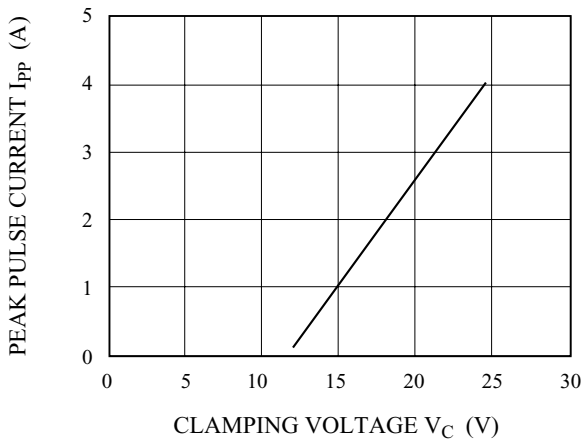
$I_R - V_R$



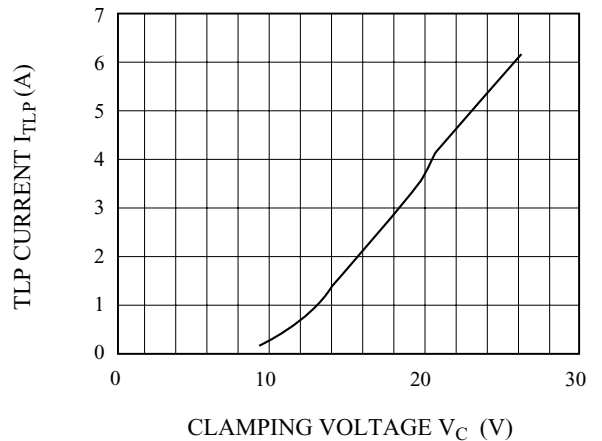
$C_T - V_R$



$V_C - I_{pp}$



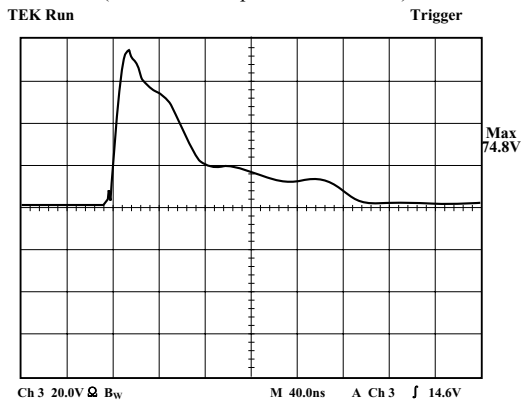
TLP CURVE



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ESD Clamping

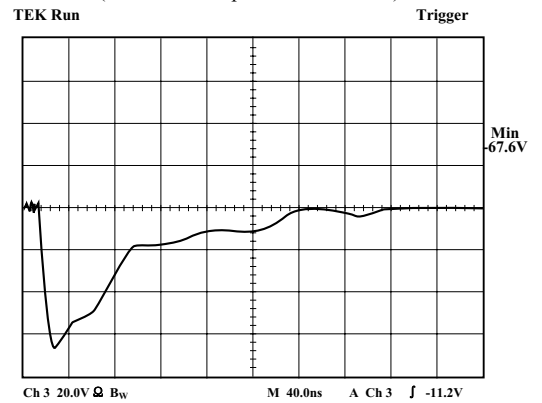
(+8 kV Contact per IEC 61000-4-2)



Note : Data is taken with a 10x attenuator

ESD Clamping

(-8 kV Contact per IEC 61000-4-2)



Note : Data is taken with a 10x attenuator

PULSE WAVEFORM

