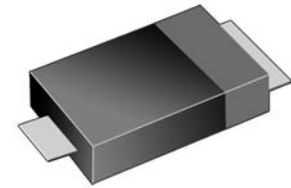


Protection in Portable Electronics Applications.

FEATURES

- 1,000 Watts peak pulse power ($t_p=8/20 \mu s$)
- Transient protection for data lines to
IEC61000-4-4(EFT) 40A($t_p=5/50ns$)
IEC61000-4-5(Lightning) 43A($t_p=8/20 \mu s$)
- Small package for use in portable electronics.
- Protects on I/O or power line.
- Low clamping voltage.
- Low leakage current.
- Suffix U : Qualified to AEC-Q101.
ex) PG10HSUSF-RTK/HU



USF (Lead-type)

PRODUCT DESCRIPTION

- Molding compound flammability rating : UL 94V-0
- Pb-Free, Halogen-Free, RoHs Compliant

Package dimensions (USF)	Pin configurations (Uni-directional)																				
1. ANODE 2. CATHODE <table border="1"> <thead> <tr> <th>DIM</th><th>MILLIMETERS</th></tr> </thead> <tbody> <tr> <td>A</td><td>1.9±0.1</td></tr> <tr> <td>B</td><td>2.5±0.2</td></tr> <tr> <td>C</td><td>0.6±0.1</td></tr> <tr> <td>D</td><td>0.88±0.1</td></tr> <tr> <td>E</td><td>1.25+0.2/-0.1</td></tr> <tr> <td>F</td><td>1.4±0.1</td></tr> <tr> <td>G</td><td>0.5±0.1</td></tr> <tr> <td>H</td><td>0.13+0.05/-0.03</td></tr> <tr> <td>I</td><td>0.6±0.1</td></tr> </tbody> </table>	DIM	MILLIMETERS	A	1.9±0.1	B	2.5±0.2	C	0.6±0.1	D	0.88±0.1	E	1.25+0.2/-0.1	F	1.4±0.1	G	0.5±0.1	H	0.13+0.05/-0.03	I	0.6±0.1	
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ORDERING INFORMATION

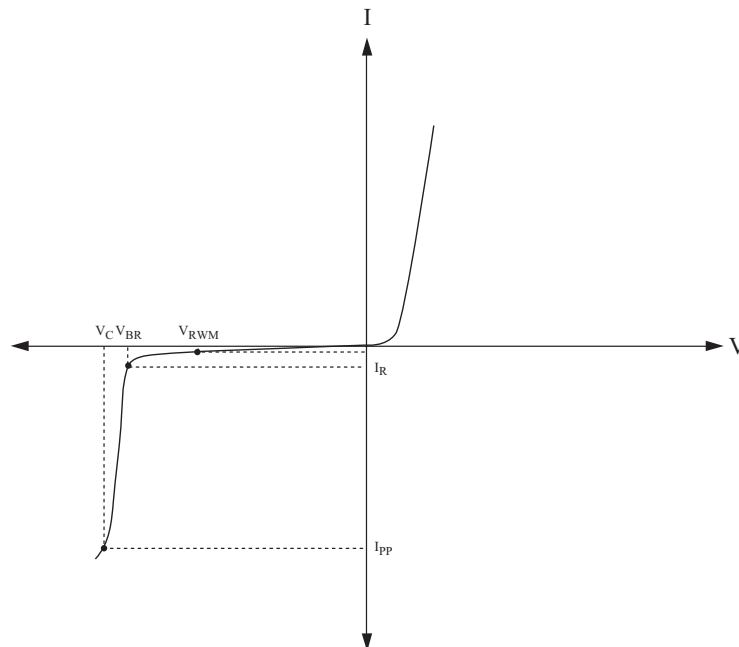
Part Number	Qty per Reel	Reel Size	Marking code
PG10HSUSF - RTK	3,000	7 inch	HS
PG10HSUSF - RTH			

PG10HSUSF

MAXIMUM RATING (Ta=25 °C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Peak Pulse Power (tp=8/20 μs)	P _{PK}	1,000	W
Peak Pulse Current (tp=8/20 μs)	I _{PP}	43	A
Junction Temperature	T _J	150	
Storage Temperature	T _{STG}	-55 ~ 150	

DEFINITIONS OF ELECTRICAL CHARACTERISTIC SYMBOL

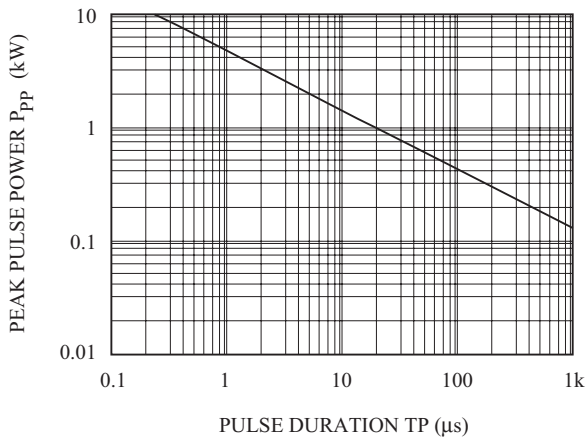


ELECTRICAL CHARACTERISTICS (Ta=25 °C)

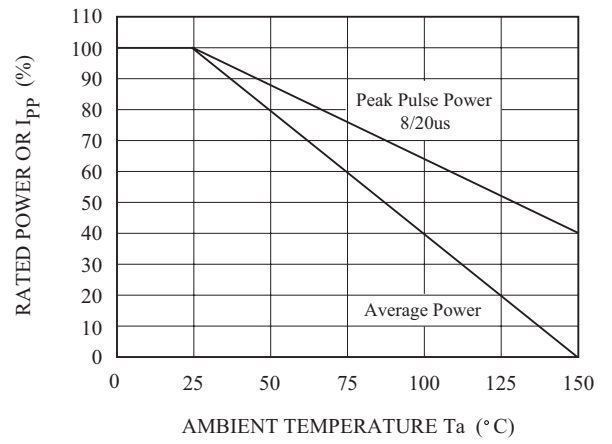
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Stand-Off Voltage	V _{RWM}	-	-	-	10	V
Reverse Breakdown Voltage	V _{BR}	I _t =1mA	12	-	-	V
Reverse Leakage Current	I _R	V _{RWM} =10V	-	-	1	μA
Clamping Voltage	V _C	I _{PP} =43A, tp=8/20 μs	-	21	24	V
Total Capacitance	C _T	V _R =0V, f=1MHz	-	320	500	pF
Electrostatic Discharge	V _{ESD}	IEC61000-4-2	Air	± 30	-	kV
			Contact	± 30		

PG10HSUSF

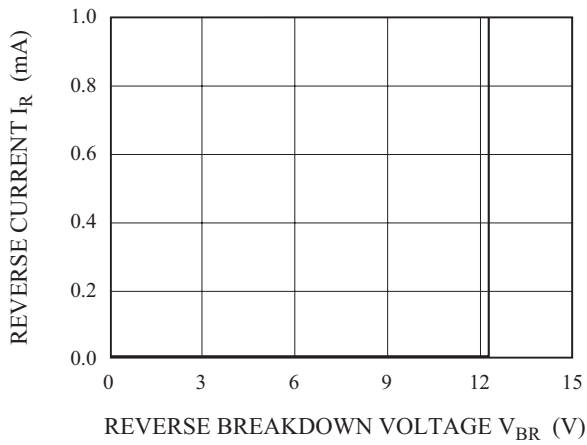
NON-REPETITIVE PEAK PULSE
POWER VS. PULSE TIME



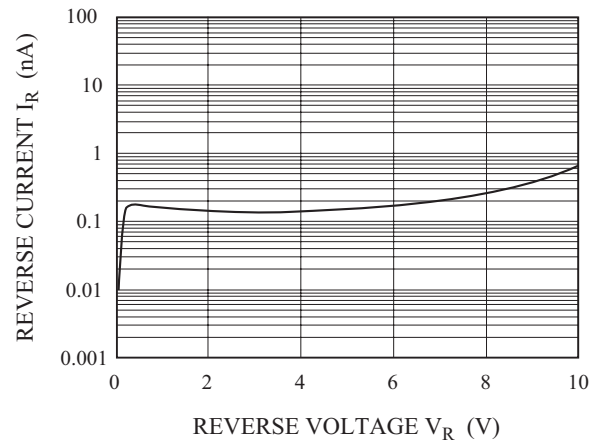
POWER DERATION CURVE



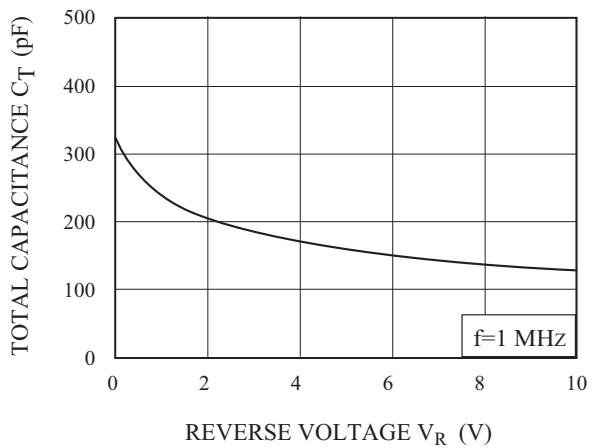
$I_R - V_{BR}$



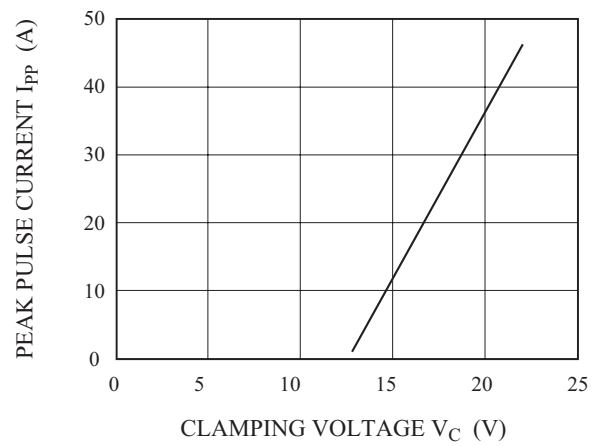
$I_R - V_R$



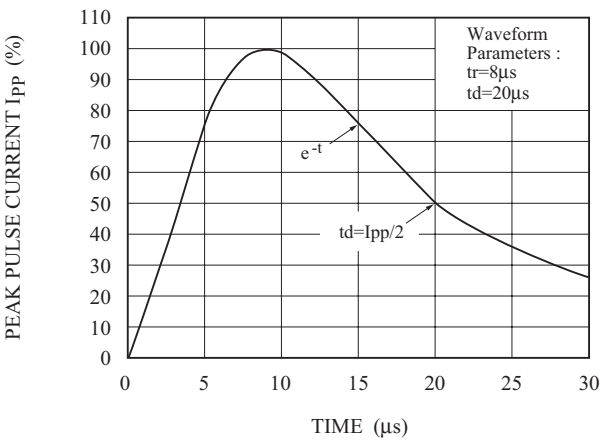
$C_T - V_R$



$V_C - I_{pp}$



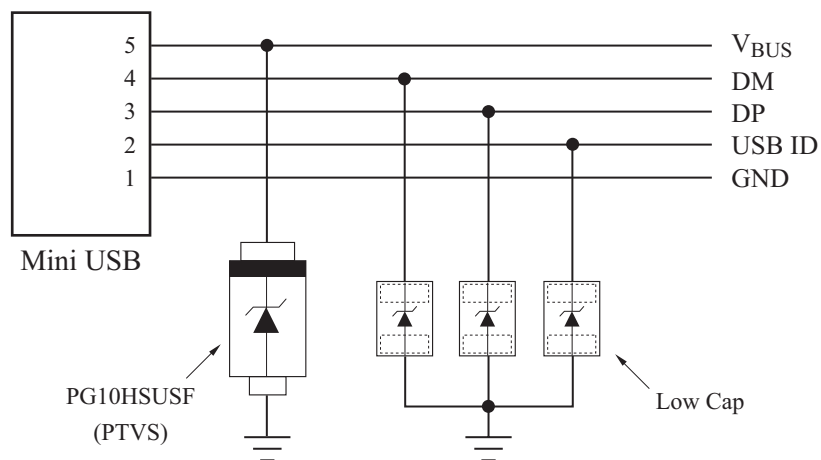
PULSE WAVEFORM



PG10HSUSF

APPLICATIONS

- Power Supply Protection
- USB V_{BUS}



Recommended pad dimension & Marking Information

Recommended pad dimension	Marking Code
0.8 0.5 2.0 1.1	Type No. Lot No. HS 1234 CATHODE MARK