

Protection in Portable Electronics Applications.

FEATURES

- Transient protection for data lines to
 - IEC61000-4-2(ESD) : Air mode $\pm 15\text{kV}$ / Contact mode $\pm 12\text{kV}$
 - IEC 61000-4-5(Surge) : $3\text{A}(t_p=8/20\ \mu\text{s})$
- Low capacitance $C_T = 25\text{pF}(\text{Max})$
- Uni-directional, symmetrical working voltage up to : $V_{\text{RWM}} = 33\text{V}$
- Small Size $1.0 \times 0.6 \times 0.4\text{mm}$



TFSC (SMD-type)

PRODUCT DESCRIPTION

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

Package dimensions (TFSC)	Pin configurations (Uni-directional)																		
<table border="1"> <thead> <tr> <th>DIM</th><th>MILLIMETERS</th></tr> </thead> <tbody> <tr> <td>A</td><td>1.00 ± 0.05</td></tr> <tr> <td>B</td><td>$0.80 + 0.10 / - 0.05$</td></tr> <tr> <td>C</td><td>0.60 ± 0.05</td></tr> <tr> <td>D</td><td>0.30 ± 0.05</td></tr> <tr> <td>E</td><td>0.40 MAX</td></tr> <tr> <td>F</td><td>0.13 ± 0.05</td></tr> <tr> <td>G</td><td>0.10 MAX</td></tr> <tr> <td>H</td><td>0.25 MAX</td></tr> </tbody> </table>	DIM	MILLIMETERS	A	1.00 ± 0.05	B	$0.80 + 0.10 / - 0.05$	C	0.60 ± 0.05	D	0.30 ± 0.05	E	0.40 MAX	F	0.13 ± 0.05	G	0.10 MAX	H	0.25 MAX	1. ANODE 2. CATHODE
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ORDERING INFORMATION

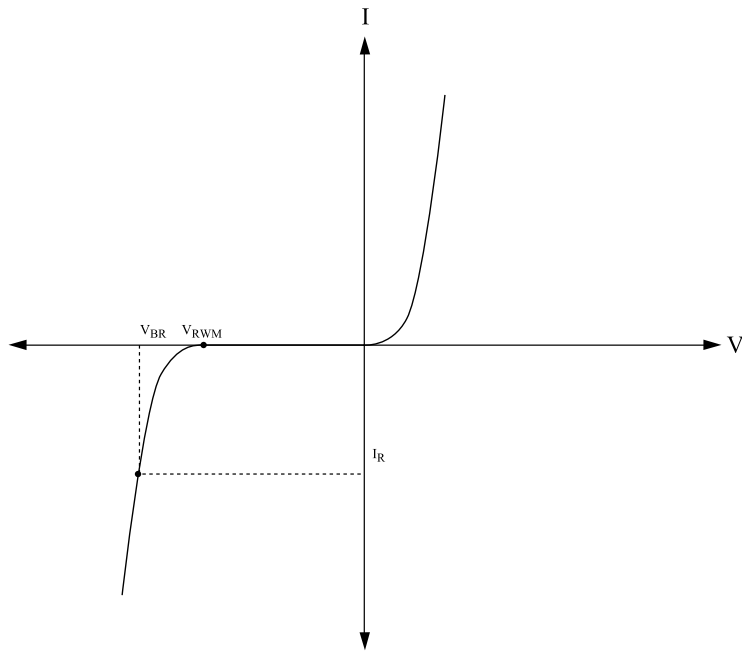
Part Number	Qty per Reel	Reel Size	Marking code
PG33DSTFC-RTK	5,000	7 inch	TF
PG33DSTFC-RTL	10,000		

PG33DSTFC

MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Peak Pulse Power (tp=8/20 μs)	P _{PK}	180	W
Peak Pulse Current (tp=8/20 μs)	I _{PP}	3	A
Junction Temperature	T _J	150	°C
Storage Temperature	T _{stg}	-55 150	°C

DEFINITIONS OF ELECTRICAL CHARACTERISTIC SYMBOL

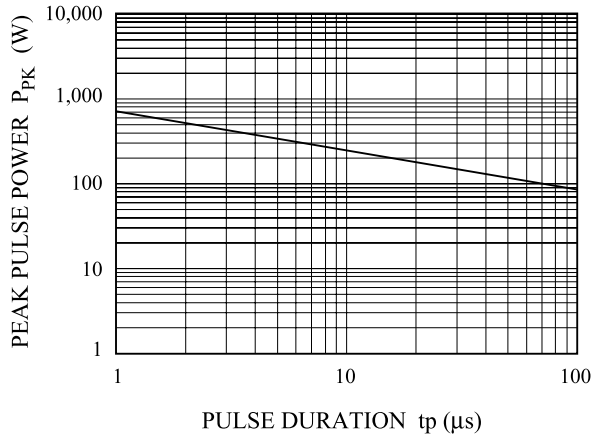


ELECTRICAL CHARACTERISTICS (Ta=25°C)

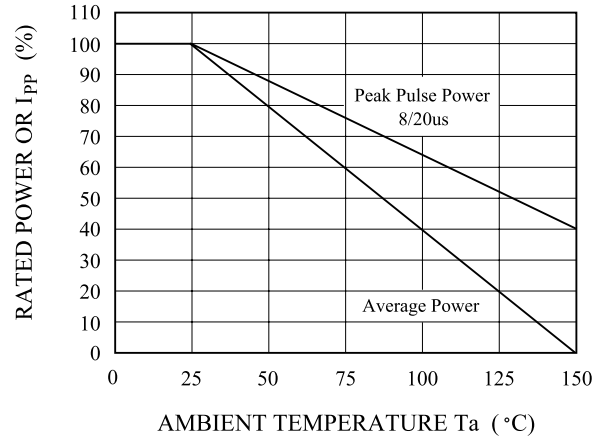
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Stand-Off Voltage	V _{RWM}	-	-	-	33	V
Reverse Breakdown Voltage	V _{BR}	I _t =1mA	34	-	-	V
Reverse Leakage Current	I _R	V _{RWM} =33V	-	-	1	μA
Total Capacitance	C _T	V _R =0V, f=1MHz	-	15	25	pF
Clamping Voltage	V _C	I _{PP} =1A, tp=8/20 μs (IEC61000-4-5)	-	42	45	V
		I _{PP} =3A, tp=8/20 μs (IEC61000-4-5)	-	55	60	
Electrotrical Discharge	V _{ESD}	IEC61000-4-2	Air	±15	-	kV
			Contact	±12		

PG33DSTFC

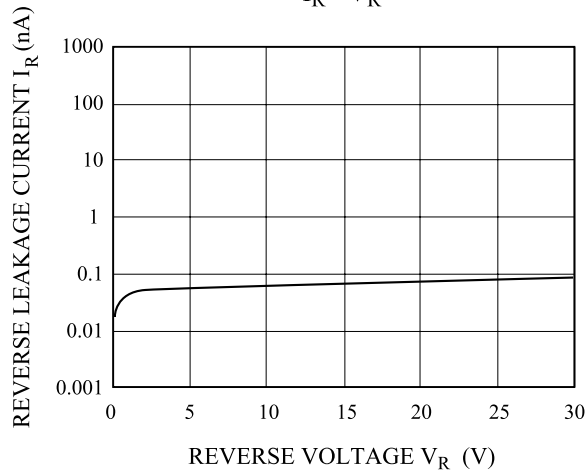
NON-REPETITIVE PEAK PULSE
POWER VS. PULSE TIME



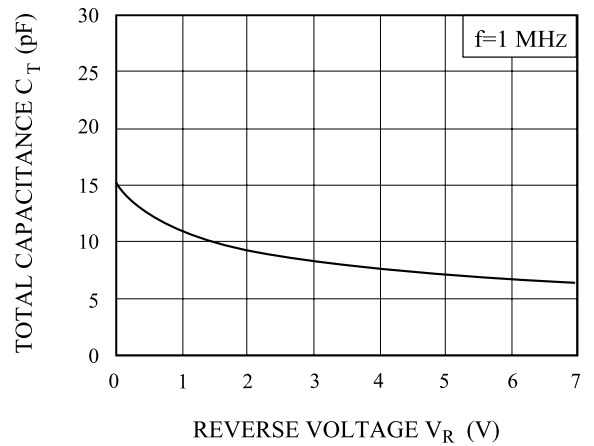
POWER DERATION CURVE



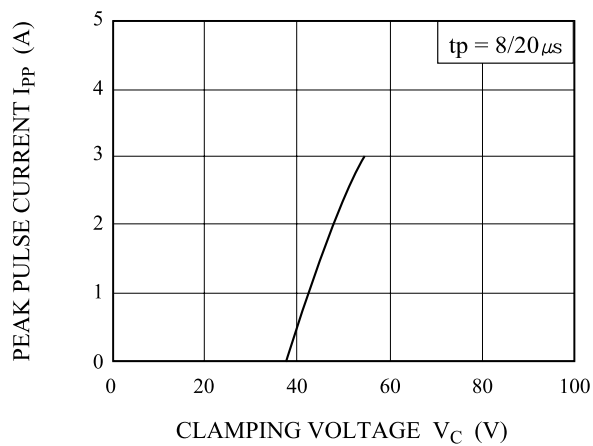
$I_R - V_R$



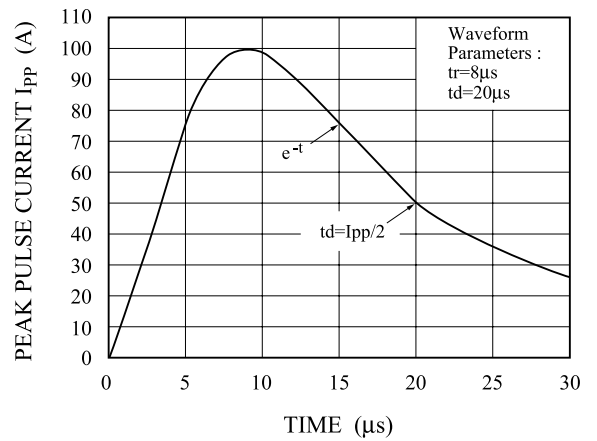
$C_T - V_R$



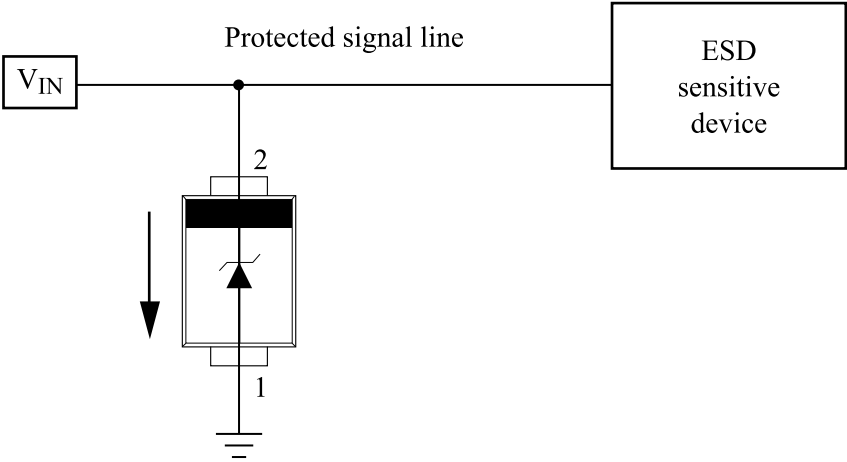
$I_{PP} - V_C$



PULSE WAVEFORM



PG33DSTFC



Recommended pad dimension & Marking Information

Recommended pad dimension	Marking Code
