

Protection in Portable Electronics Applications.

FEATURES

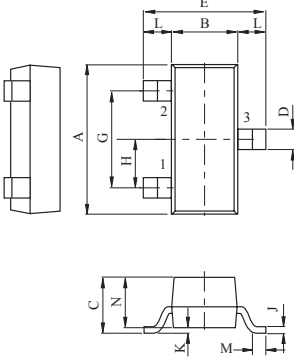
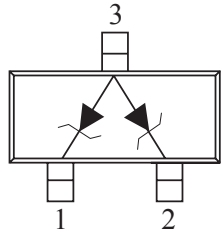
- 550 Watts Peak pulse power (tp=8/20μs)
- Transient protection for data lines to
 - IEC61000-4-2(ESD) : Air mode ±30kV / Contact mode ±30kV
 - IEC61000-4-5(Lightning) : 9A(tp=8/20μs)
- Working voltage up to : $V_{RWM} = 36V$
- Standard SOT-23 Package : $2.93 \times 1.3 \times 1.3mm$
- Protects one Bidirectional line or two unidirectional lines
- Low leakage current
- Suffix U : Qualified to AEC-Q101.
ex) PG36FSS23-RTK/HU



SOT-23 (SMD-type)

PRODUCT DESCRIPTION

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

Package dimensions (SOT-23)	Pin configurations (Uni-directional)																										
 <table border="1" data-bbox="510 1355 678 1624"> <thead> <tr> <th>DIM</th> <th>MILLIMETERS</th> </tr> </thead> <tbody> <tr><td>A</td><td>2.93 ± 0.20</td></tr> <tr><td>B</td><td>1.30+0.20/-0.15</td></tr> <tr><td>C</td><td>1.0+0.3/-0.1</td></tr> <tr><td>D</td><td>0.40+0.15/-0.05</td></tr> <tr><td>E</td><td>2.40+0.30/-0.20</td></tr> <tr><td>G</td><td>1.90 ± 0.10</td></tr> <tr><td>H</td><td>0.95 ± 0.10</td></tr> <tr><td>J</td><td>0.13+0.10/-0.05</td></tr> <tr><td>K</td><td>0.00 ~ 0.10</td></tr> <tr><td>L</td><td>0.55 ± 0.10</td></tr> <tr><td>M</td><td>0.20 MIN</td></tr> <tr><td>N</td><td>1.00+0.20/-0.10</td></tr> </tbody> </table>	DIM	MILLIMETERS	A	2.93 ± 0.20	B	1.30+0.20/-0.15	C	1.0+0.3/-0.1	D	0.40+0.15/-0.05	E	2.40+0.30/-0.20	G	1.90 ± 0.10	H	0.95 ± 0.10	J	0.13+0.10/-0.05	K	0.00 ~ 0.10	L	0.55 ± 0.10	M	0.20 MIN	N	1.00+0.20/-0.10	 <p data-bbox="949 1635 1348 1668">1. CATHODE 2. CATHODE 3. ANODE</p>
DIM	MILLIMETERS																										
A	2.93 ± 0.20																										
B	1.30+0.20/-0.15																										
C	1.0+0.3/-0.1																										
D	0.40+0.15/-0.05																										
E	2.40+0.30/-0.20																										
G	1.90 ± 0.10																										
H	0.95 ± 0.10																										
J	0.13+0.10/-0.05																										
K	0.00 ~ 0.10																										
L	0.55 ± 0.10																										
M	0.20 MIN																										
N	1.00+0.20/-0.10																										

ORDERING INFORMATION

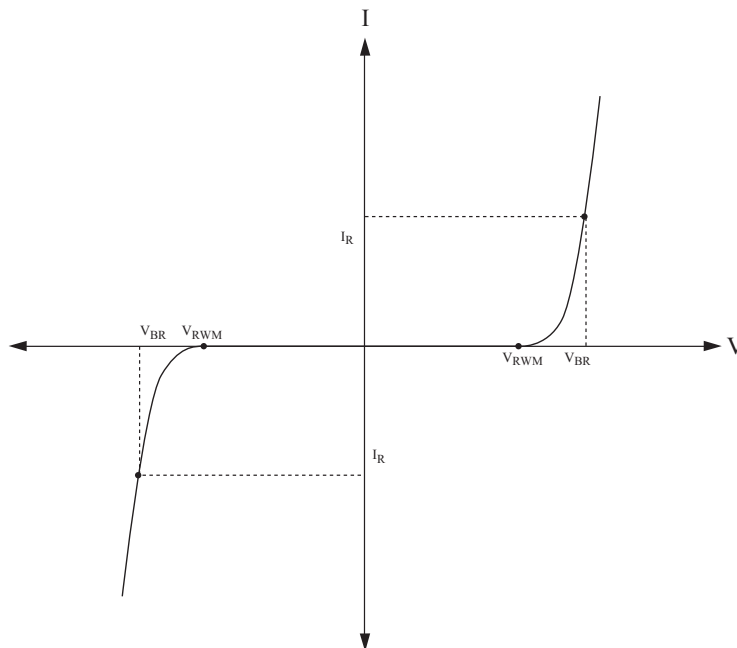
Part Number	Qty per Reel	Reel Size	Marking code
PG36FSS23-RTK/H	3,000	7 inch	E30

PG36FSS23

MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Peak Pulse Power (tp=8/20μs)	P _{PK}	550	W
Peak Pulse Current (tp=8/20μs)	I _{PP}	9	A
Junction Temperature	T _J	150	°C
Storage Temperature	T _{STG}	-55 ~ 150	°C

DEFINITIONS OF ELECTRICAL CHARACTERISTIC SYMBOL



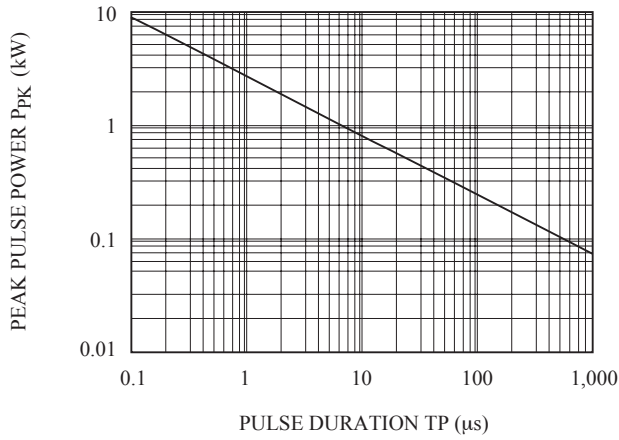
ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Reverse Stand-Off Voltage	V _{RWM}	-	-	-	36	V	
Reverse Breakdown Voltage	V _{BR}	I _T =1mA	42	-	-	V	
Reverse Leakage Current	I _R	V _{RWM} =36V	-	-	100	nA	
Clamping Voltage	V _C	I _{PP} =1A, tp=8/20μs	-	49	52	V	
		I _{PP} =9A, tp=8/20μs	-	59	61		
		I _{TLP} =16A	-	50	-		
Total Capacitance	C _T	V _R =0V, f=1MHz Between I/O Pins	-	70	100	pF	
		V _R =0V, f=1MHz Any I/O pin to GND	-	35	50		
Dynamic Resistance	R _{dyn}	ΔV _C / ΔI _{TLP} (4A-16A)	-	350	-	mΩ	
Electrostatic Discharge	V _{ESD}	IEC61000-4-2	Air	±30	-	-	kV
			Contact	±30	-	-	

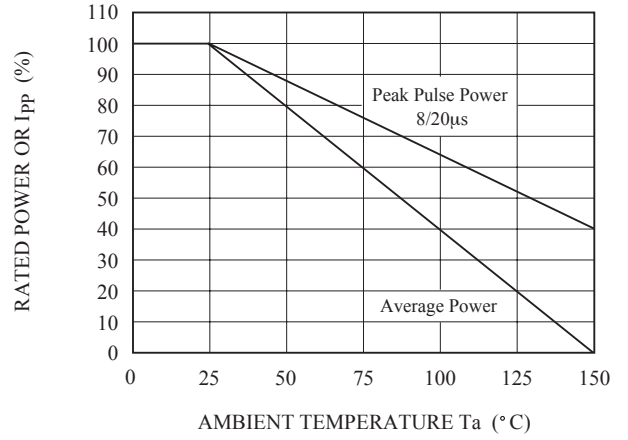
PG36FSS23

TYPICAL CHARACTERISTICS (Ta=25°C)

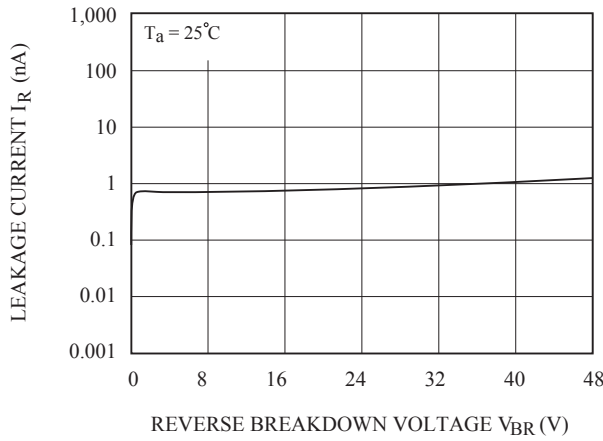
NON-REPETITIVE PEAK PULSE POWER VS. PULSE TIME



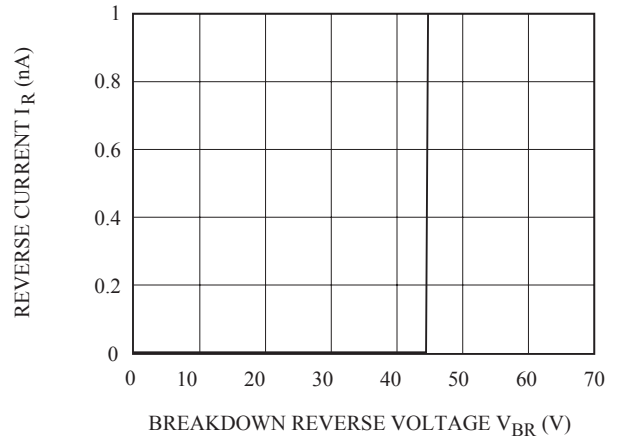
POWER DERATION CURVE



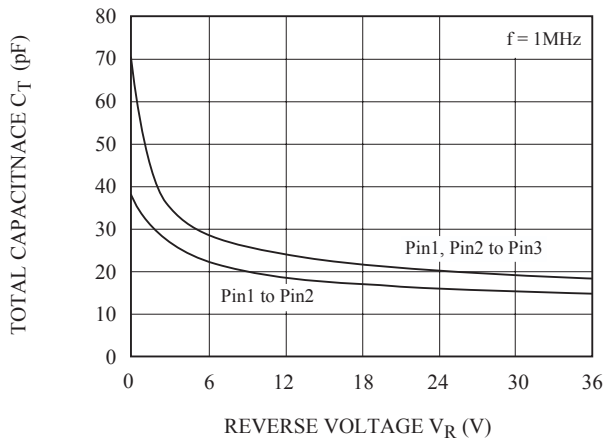
$I_R - V_R$



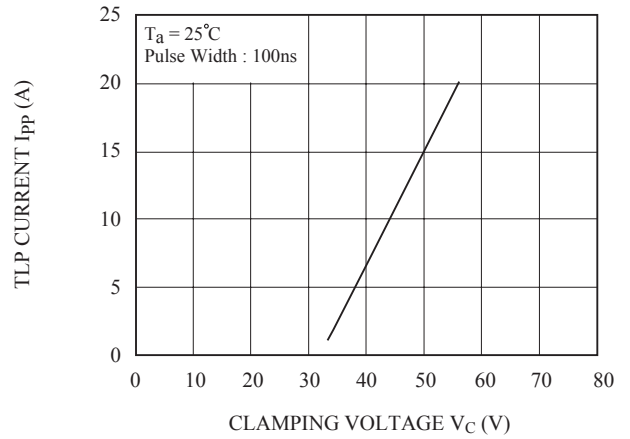
$I_R - V_{BR}$



$C_T - V_R$

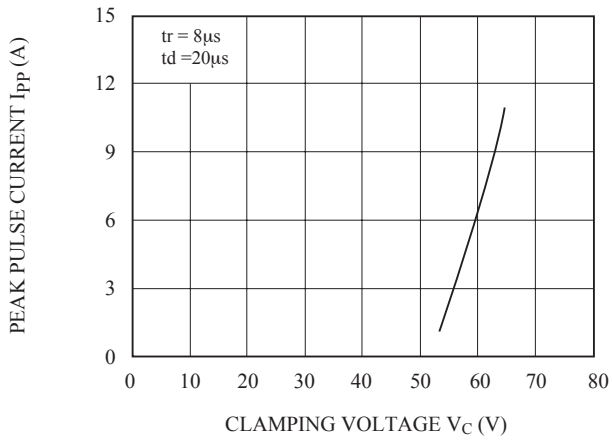


TLP CURVE

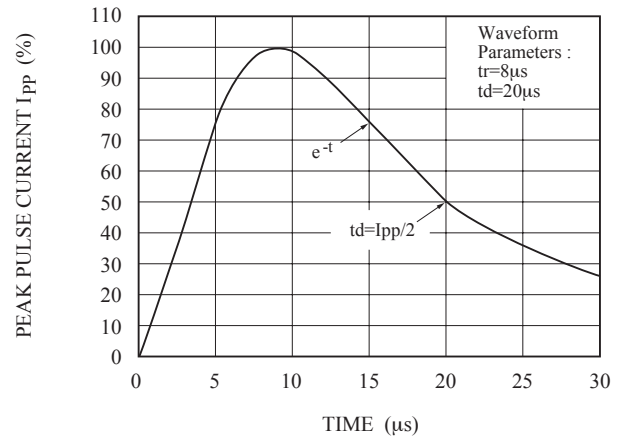


PG36FSS23

$I_{pp} - V_C$



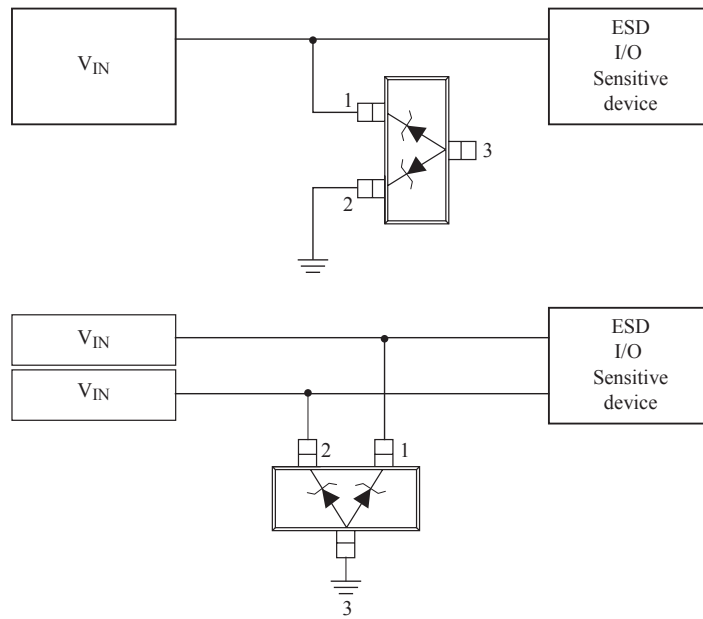
PULSE WAVEFORM



PG36FSS23

APPLICATIONS

- Microprocessor based equipment.
- Notebooks, desktops, servers.
- Portable instrumentation.



Recommended pad dimension & Marking Information

Recommended pad dimension	Marking Code
