

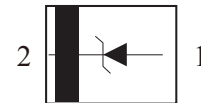
Low Clamping Voltage Uni-directional ESD / Transient Protection Diodes

FEATURES

- Transient protection for data lines to
 - IEC61000-4-2(ESD) : Air mode $\pm 30\text{kV}$ / Contact mode $\pm 30\text{kV}$
 - IEC61000-4-5(Surge) : $20\text{A}(t_p=8/20\mu\text{s})$
- Total capacitance $C_T = 160\text{pF}(\text{Typ.})$
- Uni-directional, symmetrical working voltage up to : $V_{RWM} = \pm 7.6\text{V}$
- Ultra small Size $1.0 \times 0.6 \times 0.4\text{mm}$
- Suffix U : Qualified to AEC-Q101.
 - ex) PG08GSUL2-RTL/HU
- Non Suffix : ULP-2(3) Package ex) PG08GSUL2-RTL/H
- Suffix U : ULP-2(3) Package&Qualified to AEC-Q101 ex) PG08GSUL2-RTL/HU
- Suffix R : ULP-2(4) Package ex) PG08GSUL2-RTL/HR
- Suffix UR : ULP-2(4) Package&Qualified to AEC-Q101 ex) PG08GSUL2-RTL/HUR
- Suffix P : ULP-2(5) Package ex) PG08GSUL2-RTL/HP
- Suffix UP : ULP-2(5) Package&Qualified to AEC-Q101 ex) PG08GSUL2-RTL/HUP
- Suffix UJ : ULP-2(6) Package&Qualified to AEC-Q101 ex) PG08GSUL2-RTL/HUJ



ULP-2 (leadless-type)



1. ANODE 2. CATHODE

Pin configurations (Uni-directional)

PRODUCT DESCRIPTION

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

Package dimensions (ULP-2(3))	Package dimensions (ULP-2(4))	Package dimensions (ULP-2(5))	Package dimensions (ULP-2(6))																																																																		
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ORDERING INFORMATION

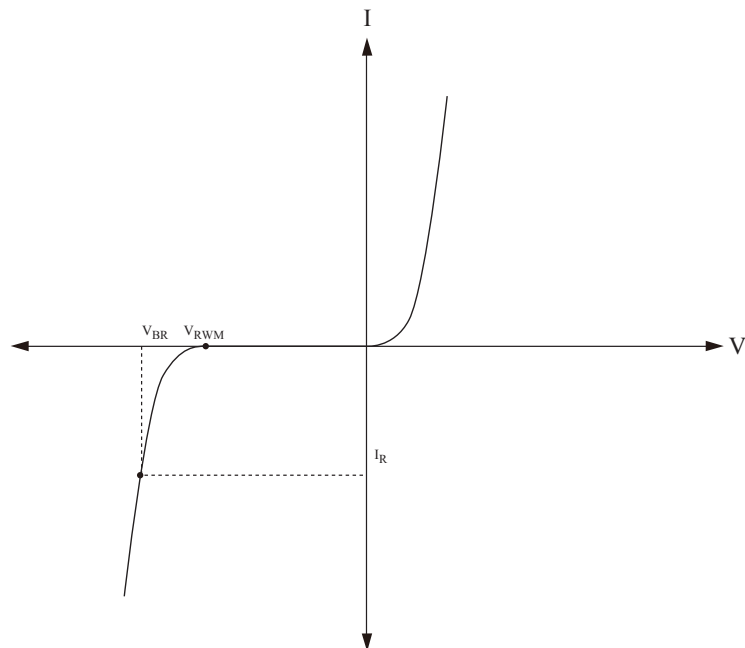
Part Number	Qty per Reel	Reel Size	Marking code
PG08GSUL2-RTL	10,000	7 inch	SH

PG08GSUL2

MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Peak Pulse Power (tp=8/20 μs)	P _{PK}	260	W
Peak Pulse Current (tp=8/20 μs)	I _{PP}	20	A
Junction Temperature	T _J	150	℃
Storage Temperature	T _{STG}	-55 ~ 150	℃

DEFINITIONS OF ELECTRICAL CHARACTERISTIC SYMBOL

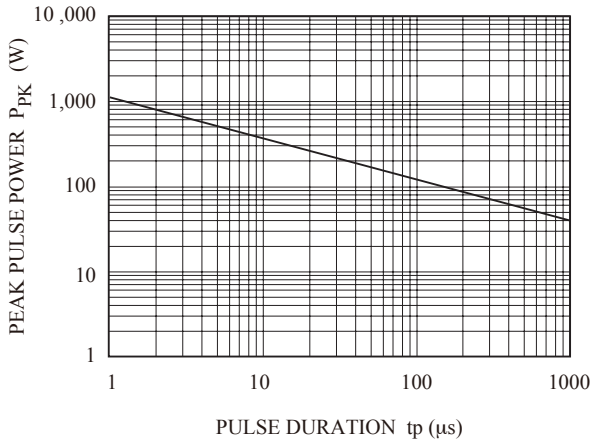


ELECTRICAL CHARACTERISTICS (Ta=25℃)

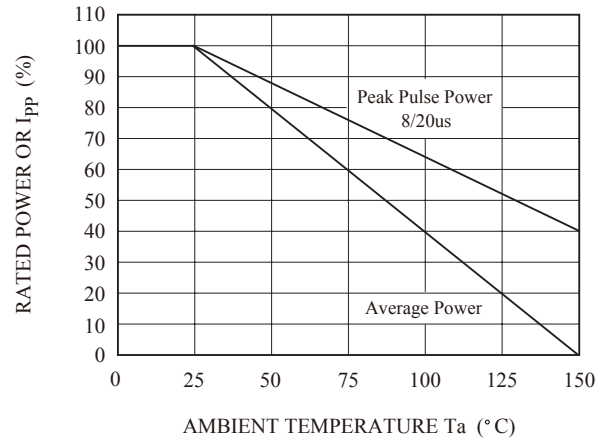
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Stand-Off Voltage	V _{RWM}	-	-	-	7.6	V
Reverse Breakdown Voltage	V _{BR}	I _R =1mA	7.9	8.1	9.1	V
Reverse Leakage Current	I _R	V _{RWM} =7.6V	-	-	100	nA
Total Capacitance	C _T	V _R =0V, f=1MHz	-	160	200	pF
Clamping Voltage	V _C	I _{PP} =10A, tp=8/20 μs	-	10.2	11.5	V
		I _{PP} =20A, tp=8/20 μs	-	11.8	13	V
		I _{TLP} =4A, tp=100ns	-	9	-	V
		I _{TLP} =16A, tp=100ns	-	10	-	V
Dynamic Resistance	r _{dyn}	I _{TLP} =4A to 16A, tp=100ns	-	0.08	-	Ω
Electrostatic Discharge	V _{ESD}	IEC61000-4-2	Air	±30	-	kV
			Contact	±30		

PG08GSUL2

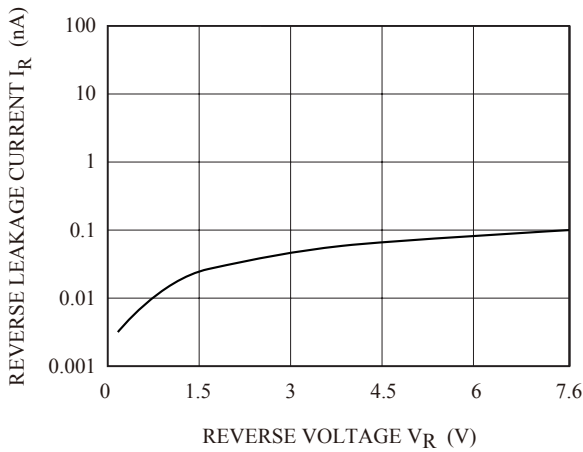
NON-REPETITIVE PEAK PULSE
POWER VS. PULSE TIME



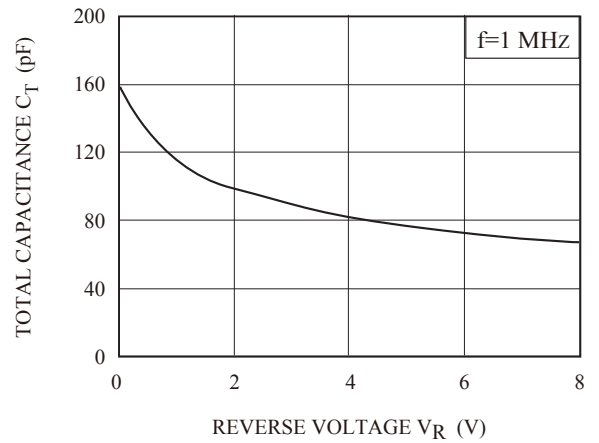
POWER DERATION CURVE



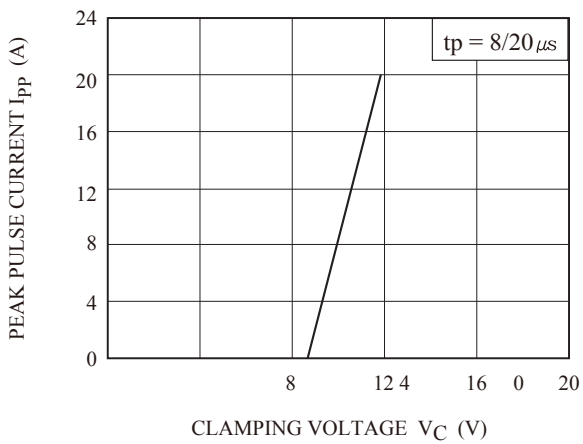
$I_R - V_R$



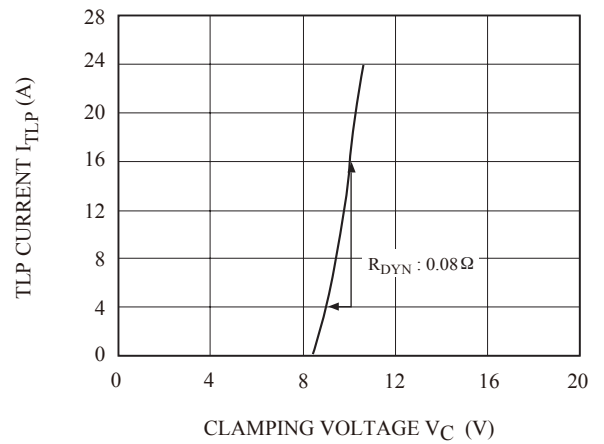
$C_T - V_R$

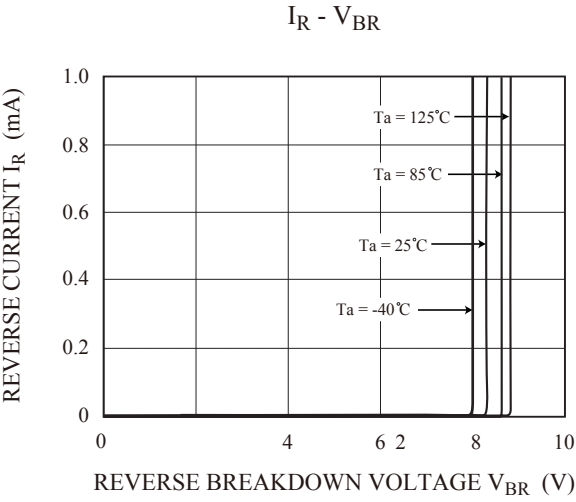


$I_{pp} - V_C$



$I_{TLP} - V_C$

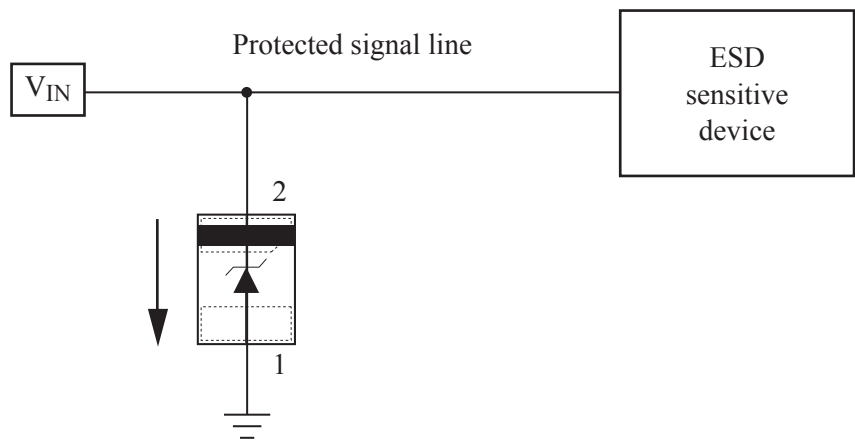




PG08GSUL2

APPLICATIONS

- TV.
- Mobile Phone
- Portable electronics.
- Power Line.



Recommended pad dimension & Marking Information

Recommended pad dimension	Marking Code
Unit : mm	CATHODE MARK SH 1 2