

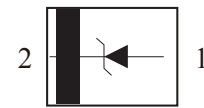
Low Clamping Voltage Transient Protection Diodes.

FEATURES

- Transient protection for Power lines to
 - IEC61000-4-2(ESD) : Air mode $\pm 30\text{kV}$ / Contact mode $\pm 30\text{kV}$
 - IEC61000-4-5(Surge) : 30A
- Total capacitance $C_T = 350\text{pF}(\text{Max.})$
- Uni-directional type.
- Reverse stand-off voltage : $V_{\text{RWM}} = 3.3\text{V}$
- Ultra small Size $1.0 \times 0.6 \times 0.5\text{mm}$
- Low reverse current : $< \text{Max } 1\mu\text{A}(V_R=3.3\text{V})$
- Non Suffix : ULP-2(3) Package ex) PG03HSUL2-RTL/H
- Suffix U : ULP-2(3) Package&Qualified to AEC-Q101 ex) PG03HSUL2-RTL/HU
- Suffix R : ULP-2(4) Package ex) PG03HSUL2-RTL/HR
- Suffix UR : ULP-2(4) Package&Qualified to AEC-Q101 ex) PG03HSUL2-RTL/HUR
- Suffix P : ULP-2(5) Package ex) PG03HSUL2-RTL/HP
- Suffix UP : ULP-2(5) Package&Qualified to AEC-Q101 ex) PG03HSUL2-RTL/HUP
- Suffix UJ : ULP-2(6) Package&Qualified to AEC-Q101 ex) PG03HSUL2-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)	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

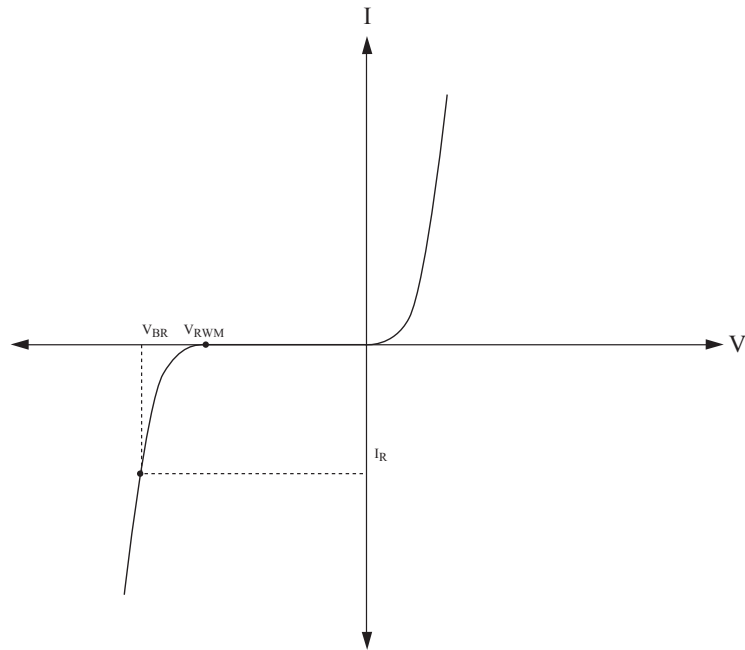
Part Number	Qty per Reel	Reel Size	Marking code
PG03HSUL2-RTL	10,000	7 inch	3D

PG03HSUL2

MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Peak Pulse Power (tp=8/20 μs)	P _{PK}	280	W
Peak Pulse Current (tp=8/20 μs)	I _{PP}	30	A
Junction Temperature	T _J	150	℃
Storage Temperature	T _{STG}	-55 ~ 150	℃

DEFINITIONS OF ELECTRICAL CHARACTERISTIC SYMBOL

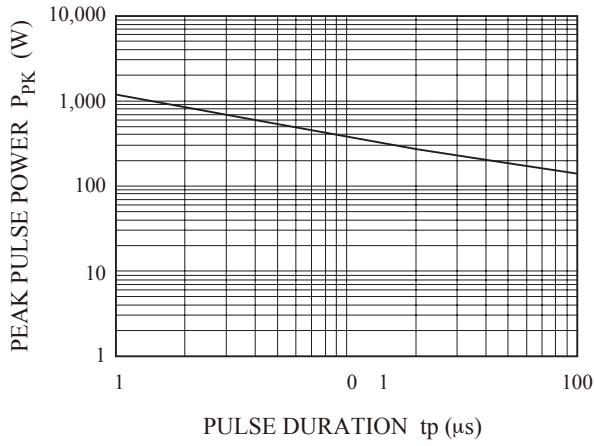


ELECTRICAL CHARACTERISTICS (Ta=25℃)

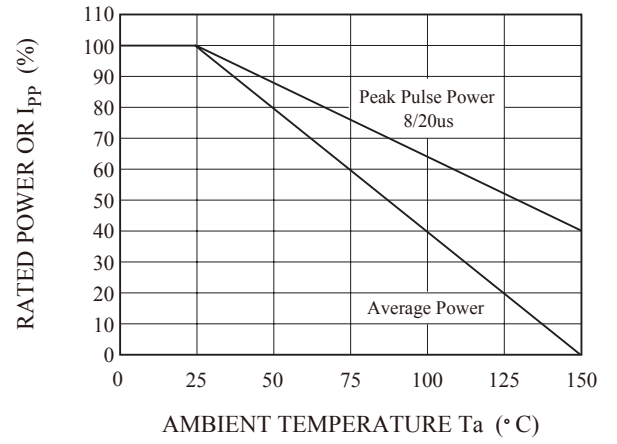
CHARACTERISTIC	SYMBOL	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Reverse Stand-Off Voltage	V _{RWM}	-		-	-	3.3	V
Reverse Leakage Current	I _R	V _R =3.3V		-	-	1	μA
Reverse Breakdown Voltage	V _{BR}	I _t =1mA		4.5	6	7.5	V
Total Capacitance	C _T	V _R =0V, f=1MHz		-	300	350	pF
Clamping Voltage	V _C	I _{PP} =30A, tp=8/20 μs (IEC61000-4-5)		-	7.8	9.3	V
		I _{TLP} =16A, tp=100ns			7.5	9.0	V
Dynamic Resistance	R _{DYN}	-		-	0.08	-	Ω
Electrostatic Discharge	V _{ESD}	IEC61000-4-2	Air	±30	-	-	kV
			Contact	±30			

PG03HSUL2

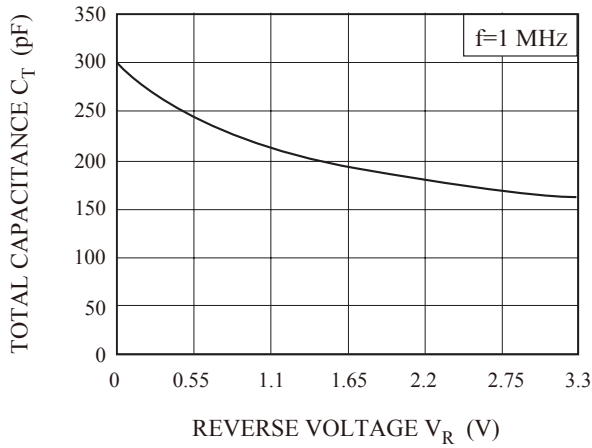
NON-REPETITIVE PEAK PULSE
POWER VS. PULSE TIME



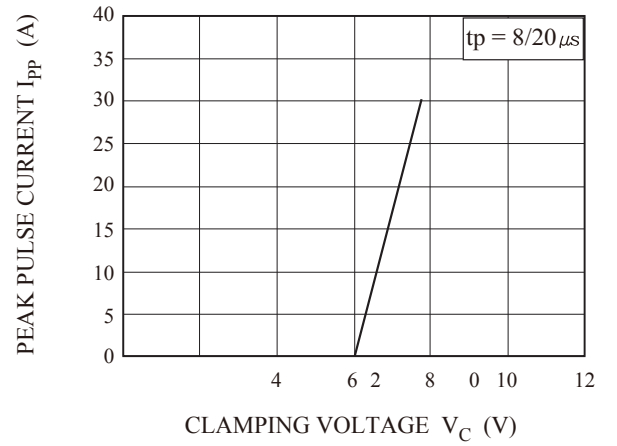
POWER DERATION CURVE



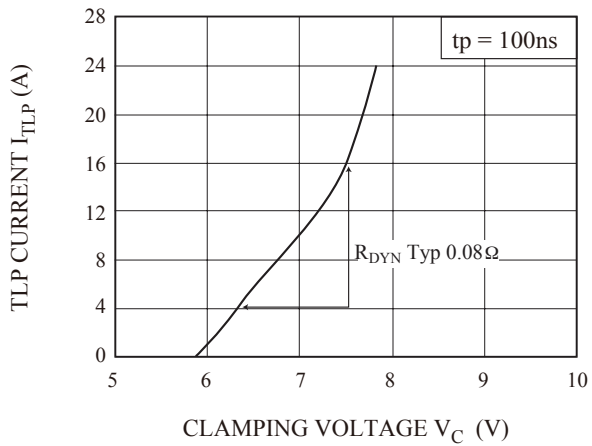
$C_T - V_R$



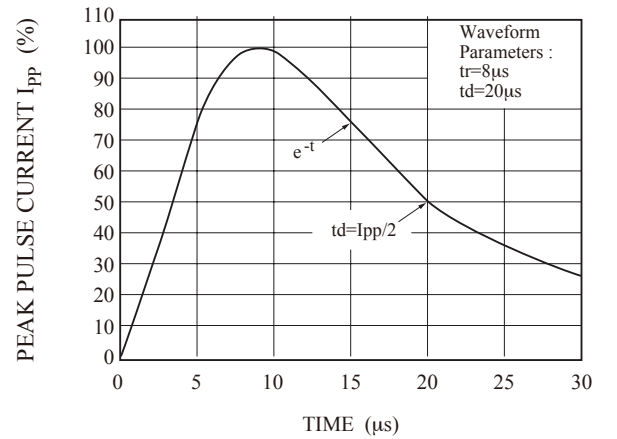
$I_{PP} - V_C$

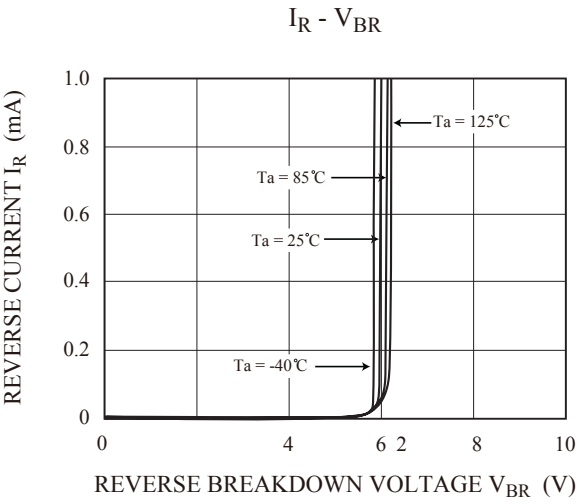


$I_{TLP} - V_C$



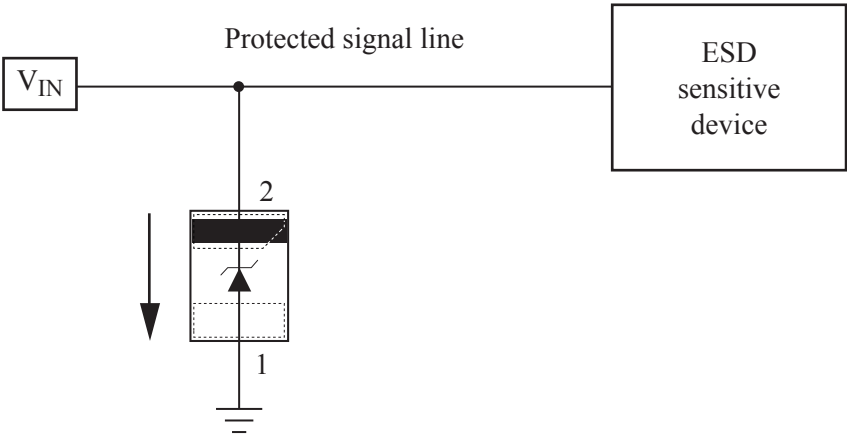
PULSE WAVEFORM





APPLICATIONS

· Power-Line



Recommended pad dimension & Marking Information

Recommended pad dimension	Marking Code
