PG05GSUL2

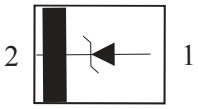
Single Line TVS Diode for ESD Protection in Portable Electronics

Protection in Portable Electronics Applications.

ULP-2 (leadless-type)

FEATURES

- 200 Watts peak pulse power (tp=8/20 us)
- Small package for use in portable electronics.
- Protects on I/O or power line.
- Low clamping voltage.
- Low leakage current.
- Non Suffix : ULP-2 Package ex) PG05GSUL2-RTL/H
- Suffix **U** : ULP-2 Package& Qualified to AEC-Q101 ex) PG05GSUL2-RTL/H**U**
- Suffix **R** : ULP-2(4) Package ex) PG05GSUL2-RTL/H**R**
- Suffix **UR** : ULP-2(4) Package&Qualified to AEC-Q101 ex) PG05GSUL2-RTL/H**UR**
- Suffix **P** : ULP-2(5) Package ex) PG05GSUL2-RTL/H**P**
- Suffix **UP** : ULP-2(5) Package&Qualified to AEC-Q101 ex) PG05GSUL2-RTL/H**UP**



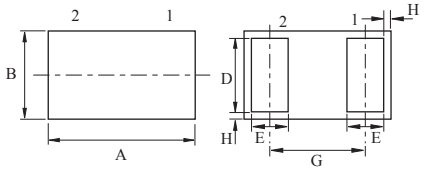
APPLICATIONS

- Cell phone handsets and accessories.
- Microprocessor based equipment.
- Notebooks, desktops, & servers.

PRODUCT DESCRIPTION

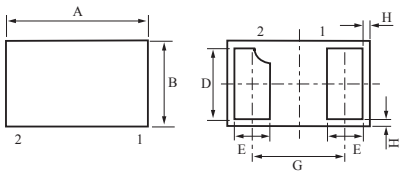
- Molding compound flammability rating : UL 94V-0
- Pb-Free, Halogen-Free, RoHs Compliant

Package dimensions (ULP-2)



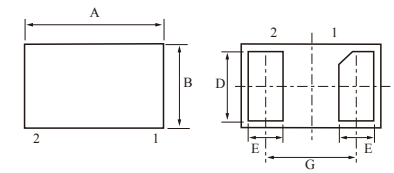
DIM	MILLIMETERS
A	1.0±0.05
B	0.6±0.05
C	0.4±0.05
C1	$0.38^{+0.02}_{-0.03}$
D	0.5±0.03
E	0.25±0.03
G	0.65±0.03
H	0.05
I	Max 0.05

Package dimensions (ULP-2(4))



DIM	MILLIMETERS
A	1.00 ± 0.10
B	0.60 ± 0.10
C	0.40 ± 0.05
D	0.50 ± 0.05
E	0.25 ± 0.05
G	Typ. 0.65
H	0.05 ±0.05

Package dimensions (ULP-2(5))



DIM	MILLIMETERS
A	1.00 ±0.05
B	0.60 ±0.05
C	0.50 ±0.05
D	0.50 ±0.03
E	0.25 ±0.03
G	0.65 BSC
I	Max 0.03

ORDERING INFORMATION

Part Number	Qty per Reel	Reel Size	Marking code
PG05GSUL2-RTL	10,000	7 inch	TA

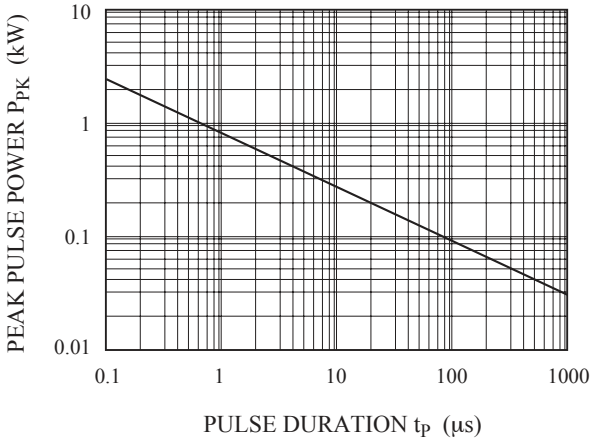
MAXIMUM RATING (Ta=25˚C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Peak Pulse Power (tp=8/20 us)	P_{PK}	200	W
Peak Pulse Current (tp=8/20 us)	I_{PP}	16	A
Junction Temperature	T_j	-55~150	˚C
Storage Temperature	T_{stg}	-55~150	˚C

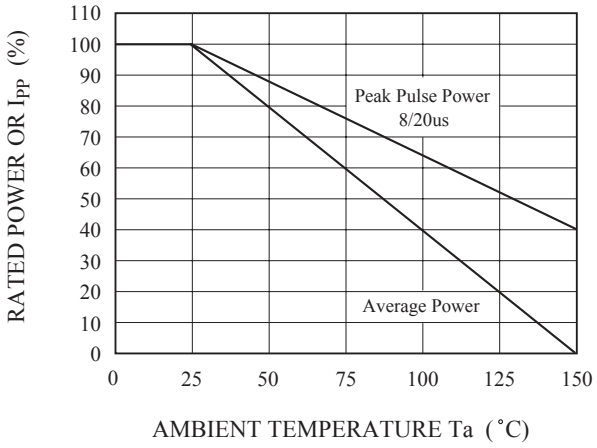
ELECTRICAL CHARACTERISTICS (Ta=25˚C)

CHARACTERISTIC	SYMBOL	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Reverse Stand-Off Voltage	V_{RWM}	-		-	-	5	V
Reverse Breakdown Voltage	V_{BR}	I_t=1mA		6	-	-	V
Reverse Leakage Current	I_R	V_{RWM}=3V		-	-	0.1	uA
		V_{RWM}=5V		-	-	5	
Forward Current	V_F	I_F=10mA		-	0.8	-	V
Clamping Voltage	V_C	I_{PP}=5A, tp=8/20 us		-	-	9.8	V
		I_{PP}=16A, tp=8/20 us		-	-	12.5	
Junction Capacitance	C_J	V_R=0V, f=1MHz		-	-	160	pF
Electrostatic Discharge	V_{ESD}	IEC61000-4-2	Air	±30	-	-	kV
			Contact				

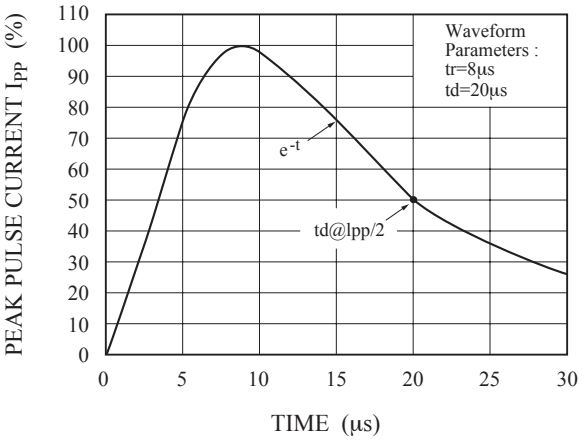
NON-REPETITIVE PEAK PULSE POWER VS. PULSE TIME



POWER DERATION CURVE



PULSE WAVEFORM



C_J - V_R