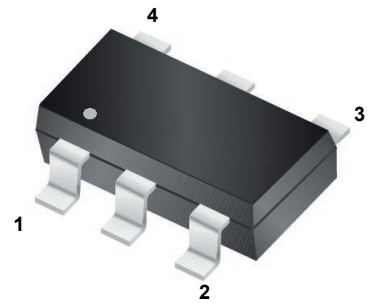
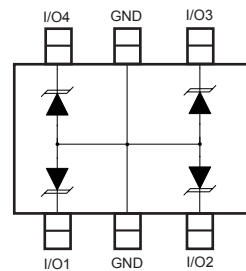


Features

- 210W-384Watts peak pulse power ($t_p=8/20\mu s$)
- SOT-23-6 package
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- ESD Protection for high-speed data lines to:
 IEC 61000-4-2 $\pm 30KV$ contact $\pm 30KV$ air
 IEC 61000-4-4 (EFT) 40A (5/50ns)
 IEC 61000-4-5 (Lightning) 5A-24A (8/20 μs)
- RoHS compliant



SOT-23-6



Schematic Diagram

Applications

- Audio Line, Speaker, Headset, Microphone Protection
- Human Interface Devices (Keyboard, Touchpad, Buttons)

Absolute Maximum Ratings ($T_A=25^\circ C$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power ($t_p=8/20\mu s$)	P_{PP}	210-384	W
Peak Pulse Current ($t_p=8/20\mu s$)	I_{PP}	5-24	A
Junction Temperature	T_J	-55 to +125	$^\circ C$
Storage temperature	T_{STG}	-55 to +150	$^\circ C$

Electrical Characteristics ($T_A=25^\circ C$ unless otherwise specified)

Part Number	Marking	V_{RWM} (V)	V_B (V)	I_T (mA)	$V_C @ 1A$ (V)	V_C (V)		I_R (μA)	C_T (pF)
		(Max.)	(Min.)		(Max.)	(@ A)	(Max.)		
GSES0514LL	514L	5	6	1	10	16	24	0.1	150
GSES0814LL	A14L	8	9.2	1	13	20	15	0.1	100
GSES1214LL	B14L	12	13.3	1	18	25	10	0.1	80
GSES1514LL	C14L	15	17	1	24	30	7	0.1	50
GSES1814LL	D14L	18	19.3	1	29	35	6	0.1	30
GSES2414LL	E14L	24	26.7	1	35	42	5	0.1	30

Typical Characteristic Curves

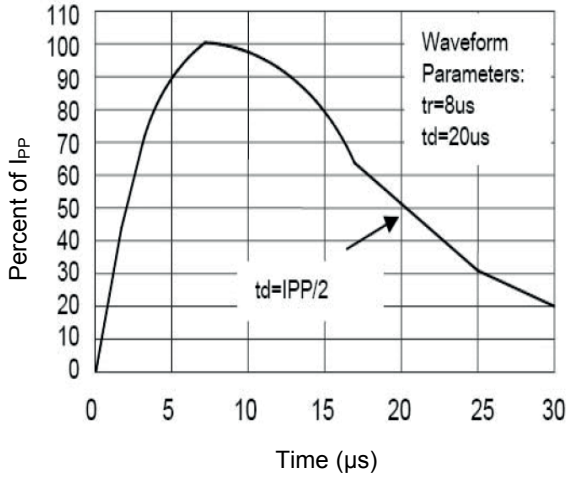


Figure 1. Pulse Waveform

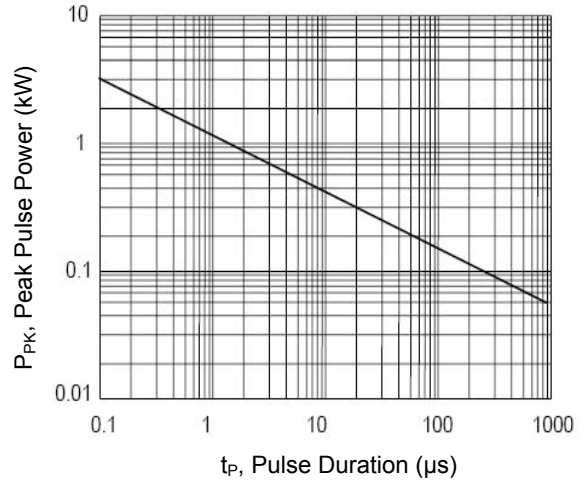


Figure 2. Non-Repetitive Peak Pulse Power vs. Pulse Time

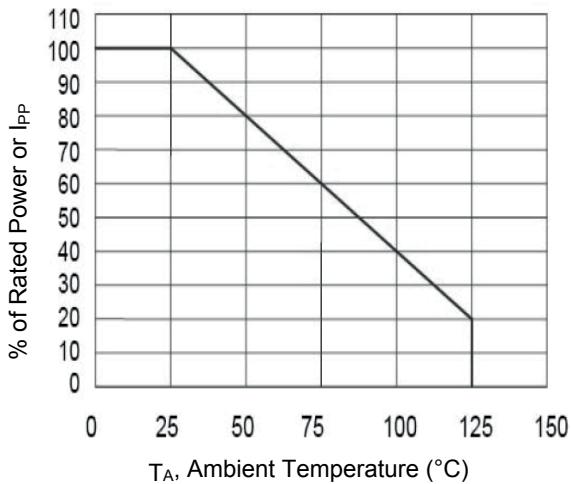


Figure 3. Power Derating Curve

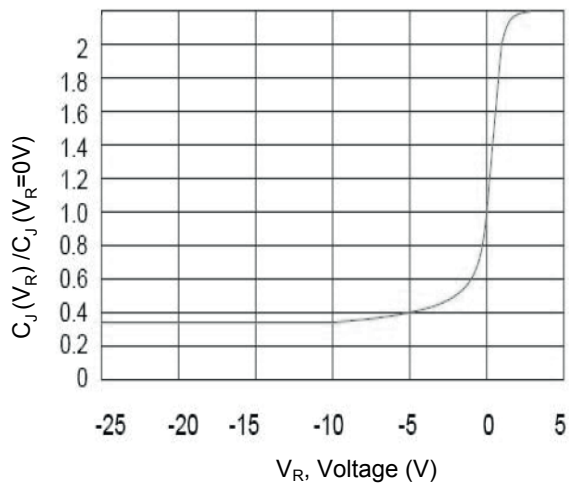
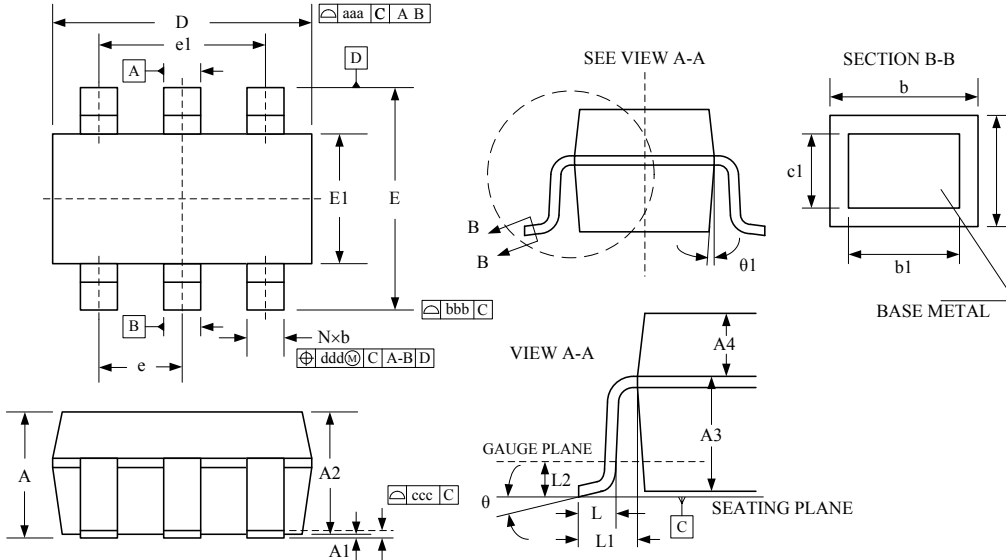


Figure 4. Junction Capacitance vs. Reverse Voltage

Package Outline Dimensions (SOT-23-6)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	-	1.450	-	0.057
A1	0.000	0.150	0.000	0.006
A2	0.900	1.300	0.035	0.012
A3	0.637	0.837	0.025	0.033
A4	0.263	0.463	0.010	0.018
b	0.300	0.500	0.012	0.020
b1	0.300	0.450	0.012	0.018
c	0.080	0.220	0.003	0.009
c1	0.080	0.200	0.003	0.008
D	2.90 BSC		0.114 BSC	
e	0.95 BSC		0.037 BSC	
e1	1.90 BSC		0.075 BSC	
E	2.80 BSC		0.110 BSC	
E1	1.60 BSC		0.063 BSC	
L	0.300	0.600	0.012	0.024
L1	0.600 REF		0.024 REF	
L2	0.250 BSC		0.010 BSC	
θ	0°	8°	0°	8°
θ1	5°	15°	5°	15°
aaa	0.150 BSC		0.006 BSC	
bbb	0.200 BSC		0.008 BSC	
ccc	0.100 BSC		0.004 BSC	
ddd	0.100 BSC		0.004 BSC	

Order Information

Device	Package	Carrier	Quantity	HSF Status
GSESx14LL	SOT-23-6	Tape & Reel	3,000pcs / Reel	RoHS Compliant

For more information, please contact us at: inquiry@goodarksemi.com