



SE05L6ADK

ESD PROTECTION DIODE

FEATURES

- IEC61000-4-2 (ESD) ±18kV (air), ±12kV (contact)
- Low Clamping Voltage
- Working Voltage 5V
- Suffix " H " indicated Halogen-free part, ex.SE05L6ADKH

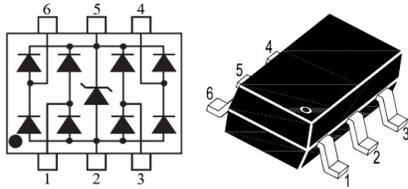
APPLICATIONS

- Digital Visual Interface (DVI)
- Monitors and flat panel displays
- HDMI, USB 2.0, MDDI, SATA ports
- Set Top Box

MECHANICAL DATA

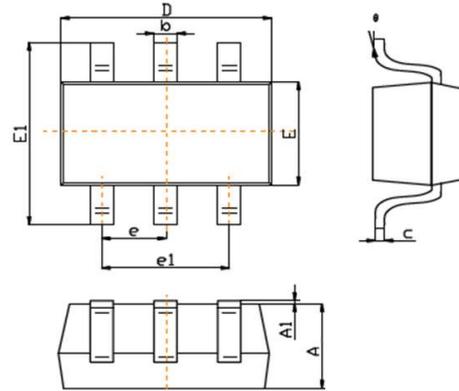
Case : SOT-23-6

PIN CONFIGURATION



1. I/O1 2. GND 3. I/O2
4. I/O3 5. VCC 6. I/O4

OUTLINE DRAWING AND DIMENSION



Dimensions	Unit (mm)		Unit (inch)	
	MIN.	MAX.	MIN.	MAX.
A	1.00	1.20	0.039	0.047
A1	0.00	0.10	0.000	0.004
b	0.30	0.50	0.012	0.020
c	0.08	0.20	0.003	0.008
D	2.70	3.10	0.106	0.122
E	1.30	1.70	0.051	0.067
E1	2.60	3.00	0.102	0.118
e	0.95 (BSC.)		0.037 (BSC.)	
e1	1.70	2.10	0.067	0.083
θ	0	8°	0	8°

Maximum Ratings (Rating at 25°C ambient temperature unless otherwise specified)

Parameter	Symbol	Value	Units
Peak Pulse Power ($t_p=8/20\mu s$ waveform)	P_{PP}	75	
Peak Pulse Current ($t_p=8/20\mu s$ waveform)	I_{PP}	5	A
ESD per IEC 61000-4-2 (Air)	V_{ESD}	18	kV
ESD per IEC 61000-4-2 (Contact)		12	
Operating Temperature Range	T_J	-55 to +125	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C



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Electrical Characteristics ($T_{amb}=25^{\circ}C$ Unless Otherwise Specified)

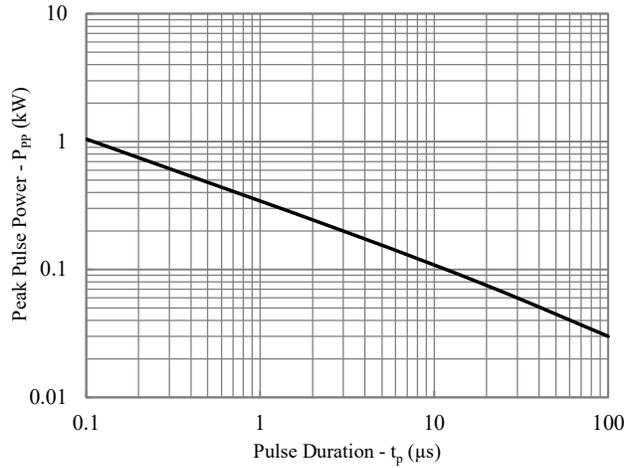
Parameter	Conditions	Symbol	Min.	Typ.	Max.	Units
Reverse Working Voltage	Any I/O pin to GND	V_{RWM}	-	-	5.0	V
Reverse Breakdown Voltage	$I_T = 1mA$, Any I/O pin to GND	V_{BR}	6.5	-	11.0	V
Reverse Leakage Current	$V_R = 5V$, Any I/O pin to GND	I_R	-	-	0.1	μA
Clamping Voltage	$I_{pp} = 1A$, Any I/O pin to GND	V_C	-	-	12	V
	$I_{pp} = 5A$, Any I/O pin to GND		-	-	15	
Junction Capacitance	$V_R = 0V$, $f = 1MHz$, Any I/O pin to GND	C_j	-	-	0.6	pF
	$V_R = 0V$, $f = 1MHz$, Between I/O pins		-	-	0.4	



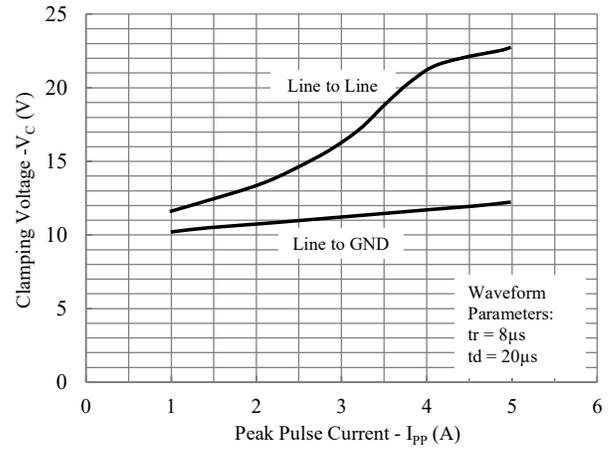
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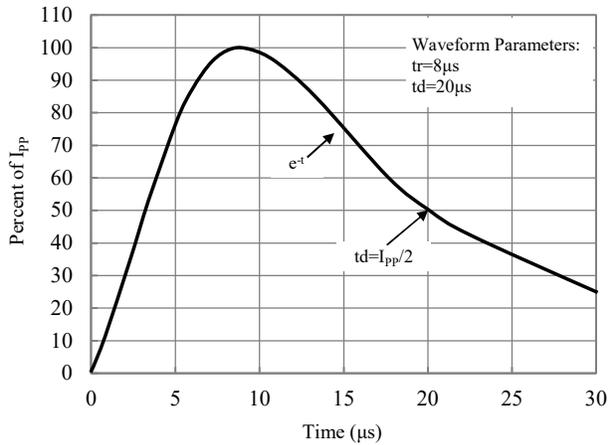
RATINGS AND CHARACTERISTIC CURVES



Non-Repetitive Peak Pulse Power vs. Pulse Time



Clamping Voltage vs. Peak Pulse Current



Pulse Waveform