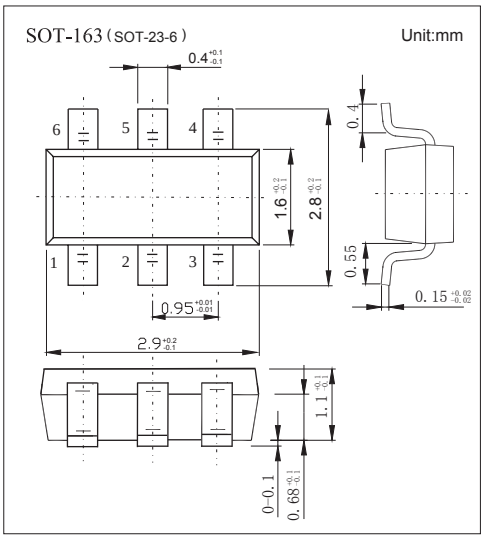
1KE05-6

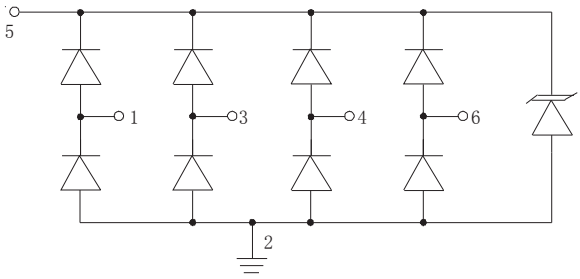
Low Capacitance TVS Diode Array

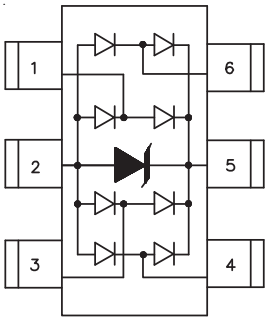
RoHS COMPLIANT



■ Features

- ESD protection for high-speed data lines to IEC 61000-4-2 (ESD) ±15kV (air), ±8kV (contact)
- Protects four I/O lines
- Low capacitance: 0.5pF typical
- Low clamping voltage
- Low operating voltage: 5V





■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
ESD per IEC 61000-4-2 (Air)	V_{ESD}	15	KV
ESD per IEC 61000-4-2 (Contact)		8	
Peak Pulse Current (tp = 8/20μs)	I_{PP}	5	A
Peak Pulse Power (tp = 8/20μs)	P_{PP}	100	W
Lead Soldering Temperature	T_L	260 (10 Sec)	℃
Junction Temperature	T_J	125	
Storage Temperature range	T_{stg}	-55 to 150	

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Low Capacitance TVS Diode Array

RoHS COMPLIANT

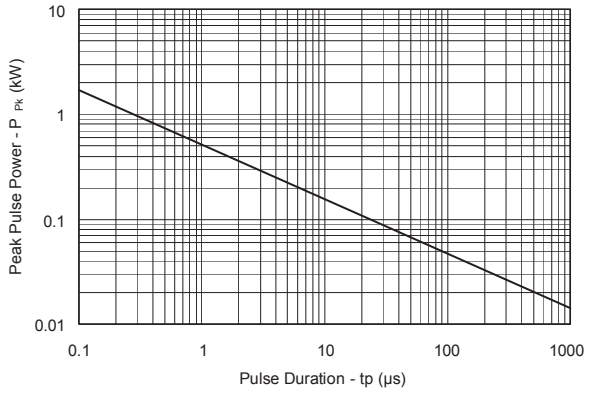
■ Electrical Characteristics Ta = 25℃

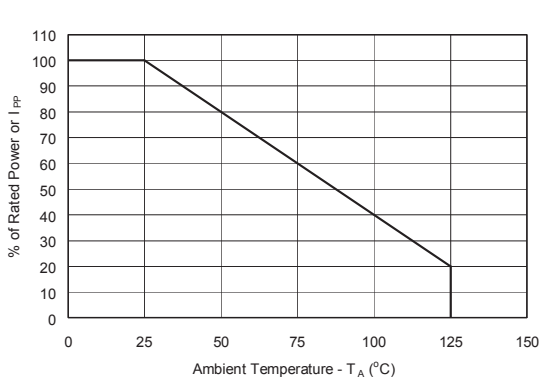
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Stand-Off Voltage	V_{RWM}	Pin 5 to 2			5	V
Reverse Breakdown Voltage	V_{BR}	I_t= 1 mA Pin 5 to 2	6			
Forward voltage	V_F	I_F= 15 mA			1.2	
Clamping Voltage	V_C	I_{PP} = 1A, tp = 8/20μs Any I/O pin to Ground			12	
		I_{PP} = 5A, tp = 8/20μs Any I/O pin to Ground			16	
Reverse voltage leakage current	I_R	V_{RWM} = 5V, T=25°C Pin 5 to 2			1.0	μA
Junction Capacitance	C_J	V_R = 0V, f = 1MHz Any I/O pin to Ground		0.5	0.8	pF
		V_R = 0V, f = 1MHz Between I/O pins		0.3	0.4	

■ Marking

Marking	V05

■ Typical Characterisitics





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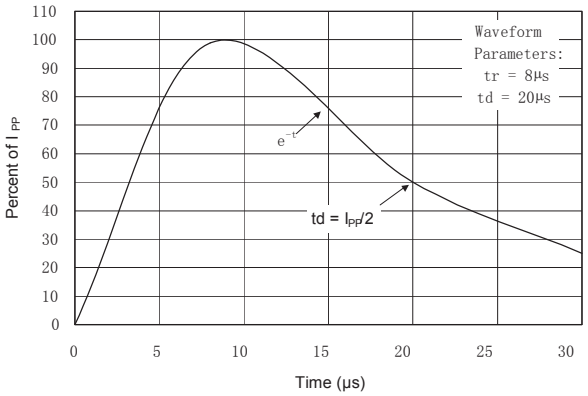
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Low Capacitance TVS Diode Array

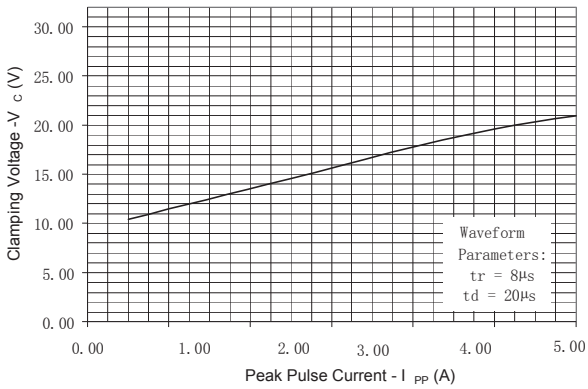
RoHS COMPLIANT

■ Typical Characterisitics

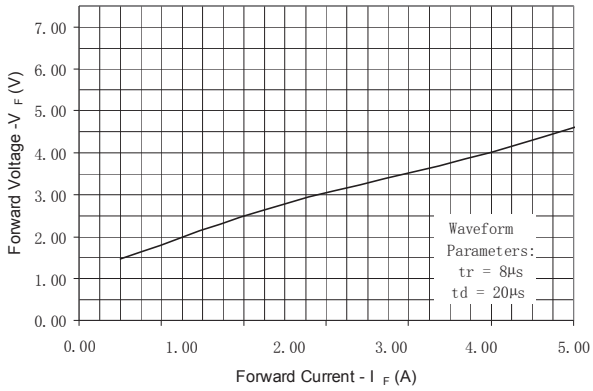
Pulse Waveform



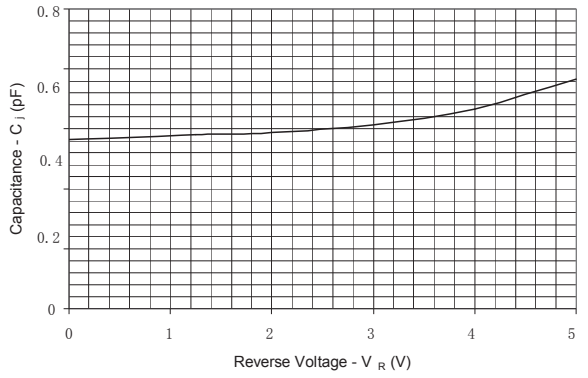
Clamping Voltage vs. Peak Pulse Current



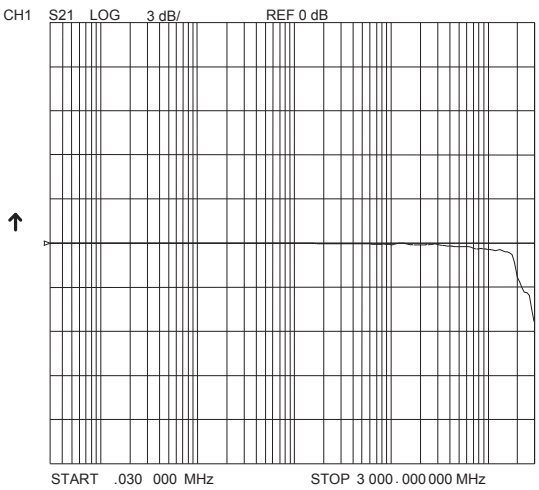
Forward Voltage vs. Forward Current



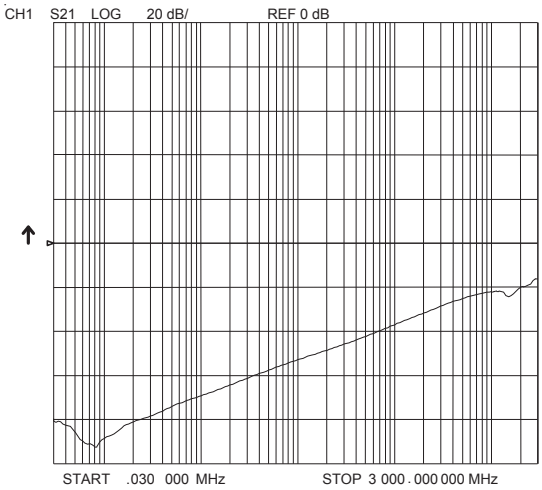
Capacitance vs. Reverse Voltage



Insertion Loss S21



Analog Cross Talk



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