

RoHS Compliant Product  
A suffix of "-C" specifies halogen and lead-free

## DESCRIPTION

The KS05VL4 provides a typical line to line capacitance of 0.3pF and low insertion loss up to 3GHz providing greater signal integrity making it ideally suited for USB 2.0 applications, such as Digital TVs, DVD players, Computing, set-top boxes and MDDI applications in mobile computing devices.

## APPLICATIONS

- Digital Cameras
- Portable Instrumentation
- Notebooks, Desktops, and Servers
- Personal Digital Assistants (PDAs)
- Cell phone handsets and accessories

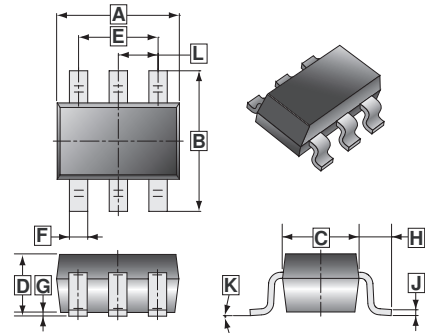
## FEATURES

- low clamping voltage
- Low leakage current
- Small package

## PACKAGE INFORMATION

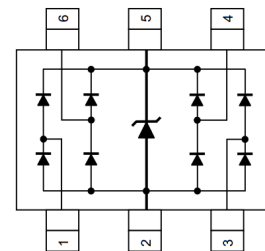
Package	MPQ	Leader Size
TSOP-6	3K	7 inch

## TSOP-6



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.70	3.10	G	0	0.10
B	2.60	3.00	H	0.60	REF.
C	1.40	1.80	J	0.12	REF.
D	1.45	MAX.	K	0°	10°
E	1.90	REF.	L	0.95	REF.
F	0.30	0.50			

## Top View



## ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise specified)

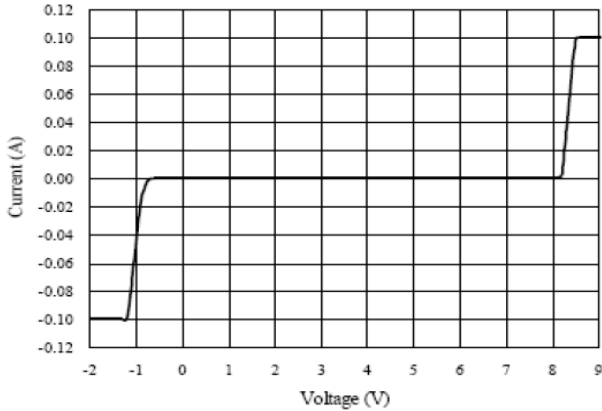
Rating	Symbol	Value	Unit
IEC 61000-4-2 (ESD)	Air contact	±27	kV
	Contact discharge	±16	
Peak pulse power (tp=8/20us)	P <sub>PK</sub>	12	W
Peak pulse current (tp=8/20us)	I <sub>PP</sub>	2	A
Storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-55~125, -55 ~ 150	°C

## ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise specified)

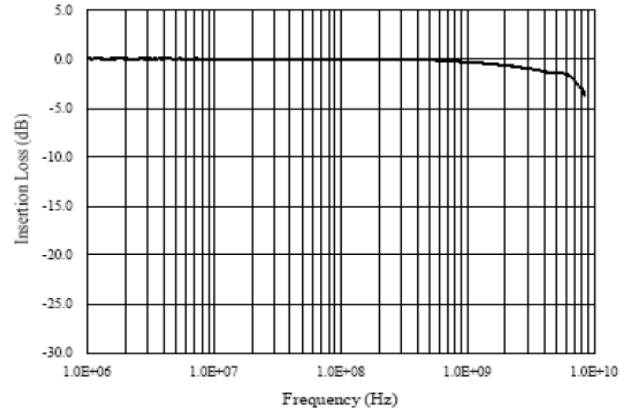
Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Reveres maximum working voltage	V <sub>RWM</sub>	I/O-GND	-	-	5	V
Reveres leakage current	I <sub>R</sub>	V <sub>RWM</sub> =5V, I/O-GND	-	-	1	µA
Reveres breakdown voltage	V <sub>BR</sub>	I <sub>T</sub> =1mA, I/O-GND	6	-	10	V
Clamping Voltage	V <sub>C</sub>	I <sub>PP</sub> =1A, tp=8/20us	-	-	12	V
Junction capacitance	C <sub>J</sub>	I/O-GND	-	0.6	0.8	pF
		I/O-I/O	-	0.3	0.4	pF

**RATINGS AND CHARACTERISTICS CURVES**

**Voltage Sweeping of I/O to GND**

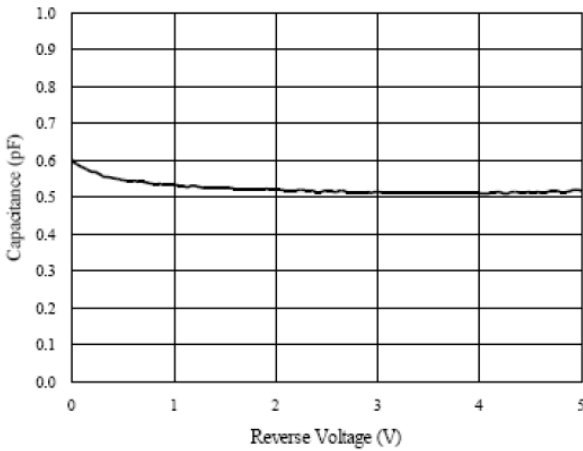


**Insertion Loss S21 of I/O to GND**

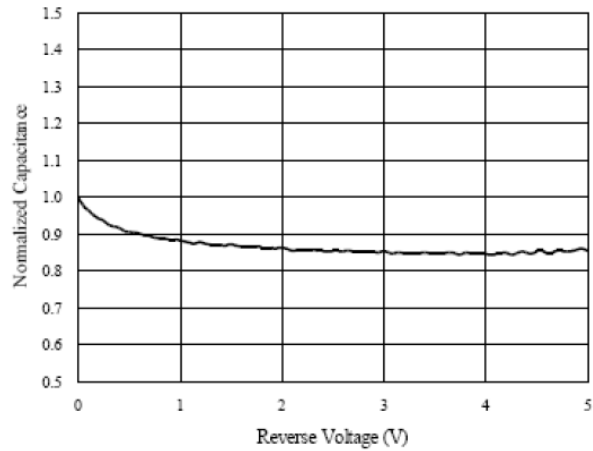


**Capacitance vs. Voltage of I/O to GND (f = 1MHz)**

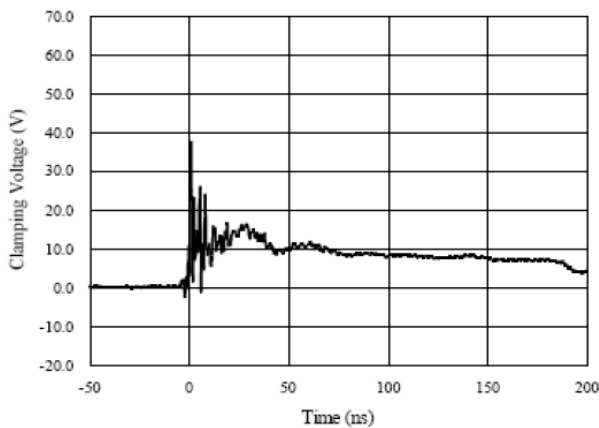
Capacitance vs. Reverse Voltage



Normalized Capacitance vs. Reverse Voltage



**ESD Clamping of I/O to GND (+8kV Contact per IEC 61000-4-2)**



**ESD Clamping of I/O to GND (-8kV Contact per IEC 61000-4-2)**

