

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

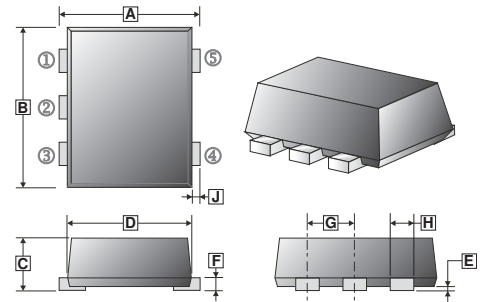
DESCRIPTION

The KS05LL4 is a transient voltage suppressors (TVS) which provide a very high level protection for sensitive electronic components that may be subjected to electrostatic discharge (ESD). It is designed to replace multiplayer varistors (MLV) in consumer equipments applications such as mobile phone, notebook, PAD, STB, LCD TV etc.

The KS05LL4 was past ESD transient voltage up to $\pm 8\text{KV}$ (contact) according to IEC61000-4-2 and withstand peak current up to 3A for 8/20us pulse according to IEC61000-4-5.

The KS05LL4 is available in SOT-553 package. Standard products are Pb-free and Halogen-free.

SOT-553



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.20	1.70	F	0.09	0.16
B	1.50	1.70	G	0.45	0.55
C	0.525	0.60	H	0.17	0.27
D	1.10	1.30	J	0.10	0.30
E	-	0.05			

APPLICATIONS

- TVs, monitors , audio
- Portable devices
- Notebooks, mother boards, graphic cards and ports.
- Set-top box and game consoles.

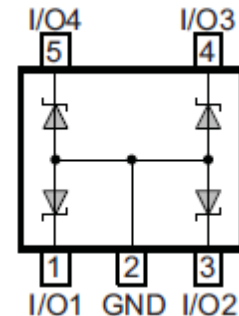
FEATURES

- Working voltage: 5V
- Peak power (tp=8/20us): 36W
- ESD protection--
IEC61000-4-2 (Contact): $\pm 8\text{KV}$
IEC61000-4-2 (Air): $\pm 15\text{KV}$
- Low leakage current
- Small package

MARKING



(Top view)



PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-553	3K	7 inch

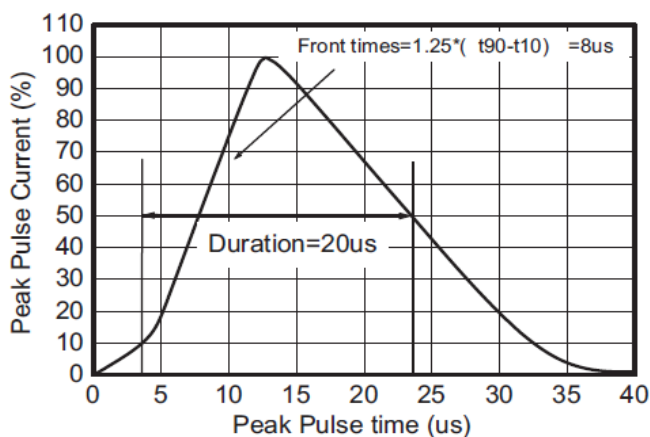
ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$ unless otherwise specified)

Rating		Symbol	Value	Unit
IEC 61000-4-2 (ESD)	Air contact	V_{ESD}	± 15	kV
	Contact discharge		± 8	
Peak pulse power ($t_p=8/20\mu\text{s}$)		P_{PK}	36	W
Peak pulse current ($t_p=8/20\mu\text{s}$)		I_{PP}	3	A
Operation & Storage temperature range		T_J, T_{STG}	150, -55 ~ 150	$^\circ\text{C}$
Lead temperature		T_L	260	$^\circ\text{C}$

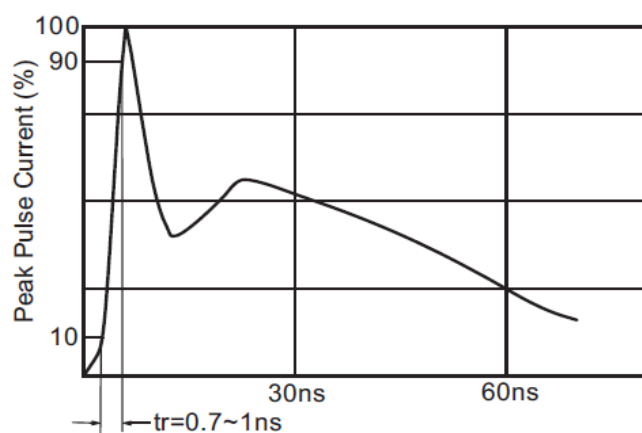
ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Reverse Working Voltage	V_{RWM}	$I_R=1\mu\text{A}$	-	-	5	V
Reverse Leakage Current	I_R	$V_{\text{RWM}}=5\text{V}$	-	-	1	μA
Reverse Breakdown Voltage	V_{BR}	$I_T=1\text{mA}$	6.2	6.8	7.5	V
Forward Voltage	V_F	$I_F=10\text{mA}$	0.4	0.8	1.2	V
Clamping Voltage	V_{Clamp}	$I_{\text{PP}}=1\text{A}, t_p=8/20\mu\text{s}$	-	-	9	V
		$I_{\text{PP}}=3\text{A}, t_p=8/20\mu\text{s}$	-	-	12	
Junction capacitance	C_J	I/O-to-GND $V_R=0, f=1\text{MHz}$	-	16	20	pF
		I/O-to-I/O $V_R=0, f=1\text{MHz}$	-	8	10	pF

RATINGS AND CHARACTERISTICS CURVES



8/20us waveform



IEC61000-4-2 waveform

RATINGS AND CHARACTERISTICS CURVES

