

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

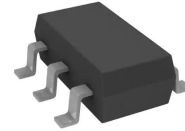
### FEATURES

- Ultra-Low Capacitance: 0.5pF (Typ.)
- Reverse Working Voltage: 5V
- IEC 61000-4-2 (ESD):  $\pm 27$ kV(Air)
- IEC 61000-4-2 (ESD):  $\pm 27$ kV(Contact)
- IEC 61000-4-5 (Surge): 3.5A (8/20 $\mu$ s)

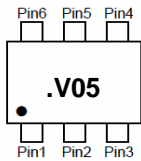
### APPLICATIONS

- Audio and video equipment
- Cellular handsets and accessories
- Computers and peripherals
- Portable electronics
- Communication systems

SOT-26



### MARKING

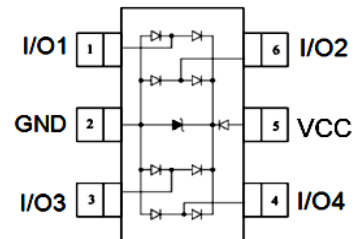


### PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-26	3K	7 inch

### ORDER INFORMATION

Part Number	Type
KSE05VL4-C	Lead (Pb)-free and Halogen-free



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

Parameter	Symbol	Ratings	Unit
IEC 61000-4-2 ESD Voltage	Air	$\pm 27$	KV
	Contact	$\pm 27$	
Peak Pulse Power @tp=8/20 $\mu$ s	P <sub>PP</sub>	40	W
Peak Pulse Current @tp=8/20 $\mu$ s	I <sub>PP</sub>	3.5	A
Operating Junction & Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55~150	°C

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Reverse Working Voltage	$V_{RWM}$	-	-	5	V	
Breakdown Voltage	$V_{BR}$	6	-	8	V	$I_T=1\text{mA}$ , Any I/O to GND
Reverse Leakage Current	$I_R$	-	-	100	nA	$V_{RWM}=5\text{V}$ , Any I/O to GND
Surge Clamping Voltage @ $t_p=8/20\mu\text{s}$	$V_C$	-	8.3	-	V	$I_{PP}=1\text{A}$ , Any I/O to GND
		-	10.1	-		$I_{PP}=3\text{A}$ , Any I/O to GND
ESD Clamping Voltage		-	30	-		IEC61000-4-2 +8kV ( $I_{TLP}=16\text{A}$ ) Contact mode
Dynamic resistance	$R_D$	-	1.097	-	$\Omega$	IEC61000-4-2, 2~+8kV ( $I_{TLP}=4\sim 16\text{A}$ ) Contact mode
Junction Capacitance @ $V_R=0\text{V}$ , $f=1\text{MHz}$	$C_J$	-	0.5	-	pF	I/O to GND
		-	0.25	-		Between I/O Pins

**RATINGS AND CHARACTERISTICS CURVES**

FIG. 1-Clamping Voltage vs Peak Pulse Current

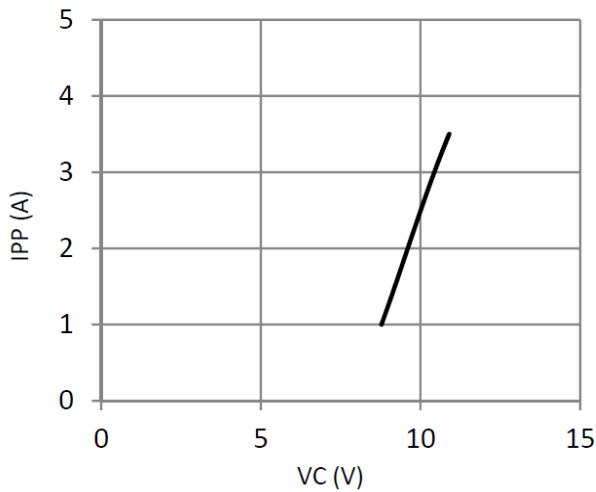


FIG. 2-Junction Capacitance

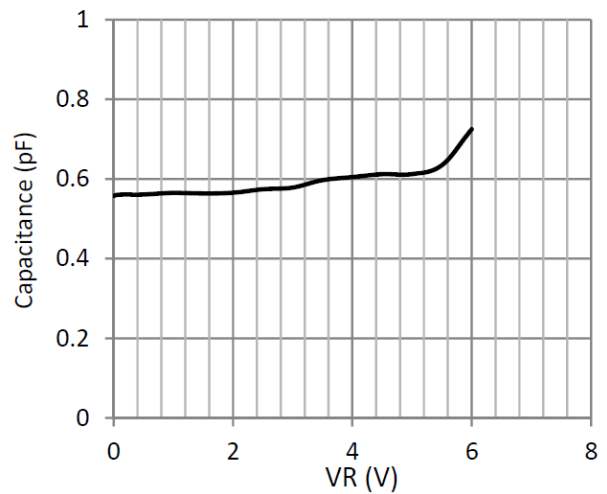
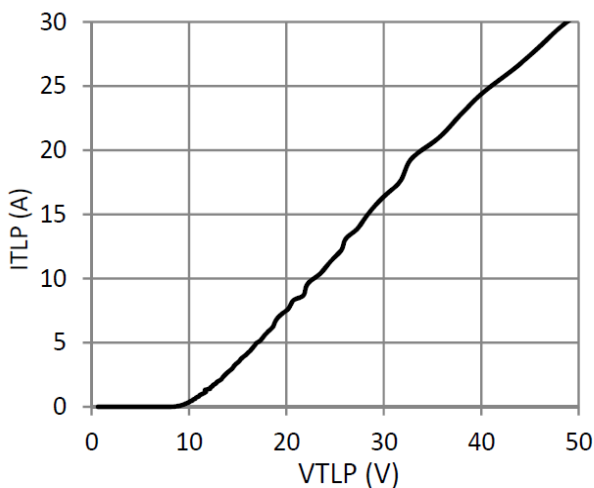
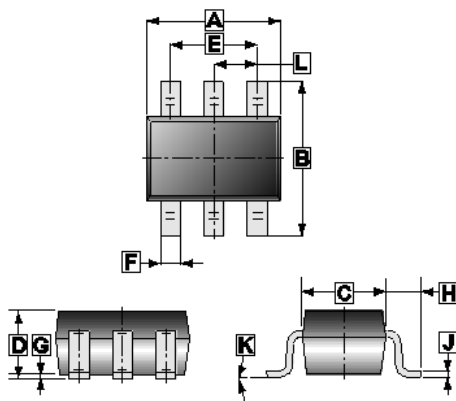


FIG. 3-TLP Curve



**PACKAGE OUTLINE DIMENSIONS**

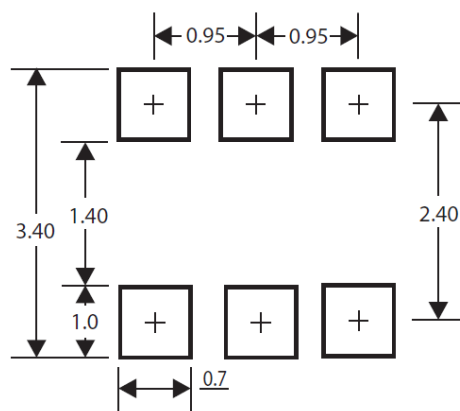
**SOT-26**



REF.	Millimeter	
	Min.	Max.
A	2.70	3.10
B	2.60	3.00
C	1.40	1.80
D	-	1.30
E	1.90 REF.	
F	0.25	0.50
G	0	0.10
H	0.60 REF.	
J	0.12 REF.	
K	0°	10°
L	0.95 REF.	

**MOUNTING PAD LAYOUT**

**SOT-26**



\*Dimensions in millimeters