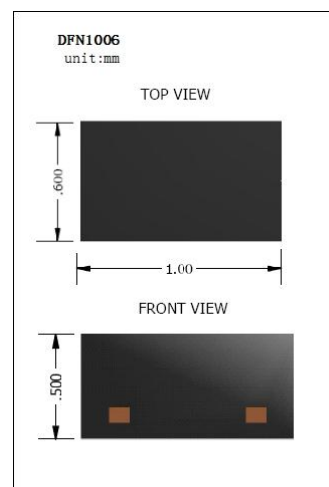
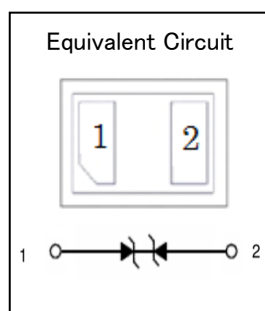


- ◇ Bi-Directional Transient Voltage Suppressor
- ◇ Low Capacitance and Low Leakage
- ◇ Response Time is Typically < 1 ns
- ◇ IEC61000-4-2 Level 4 ESD Protection
- ◇ ROHS Compliant
- ◇ UL-94 V-0 / Green EMC
- ◇ Matte Tin Lead finish (Pb-Free)

Device Marking Code	
KPESD5V0B1BL	AK



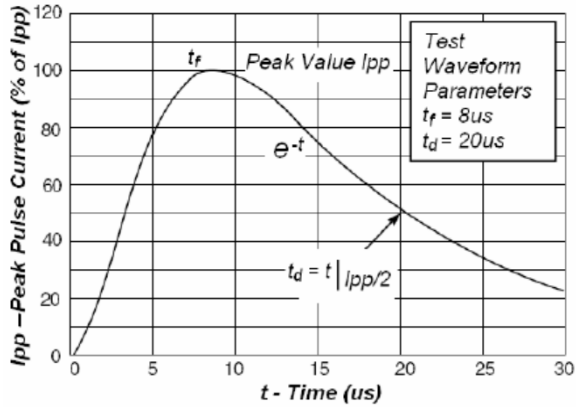
MAXIMUM RATINGS (Ta = 25 °C)

Symbol	Parameter	Value	Units
V _{ESD-Air}	ESD Voltage IEC61000-4-2 Air	±25	kV
V _{ESD-Contact}	ESD Voltage IEC61000-4-2 Contact	±20	kV
PD	Total Power Dissipation on FR-5 Board	200	mW
T _J	Junction Temperature	-55 to 150	°C
T _{STG}	Storage Temperature	-55 to 150	°C
TL	Lead Solder Temperature - Maximum (10 Second Duration)	260	°C

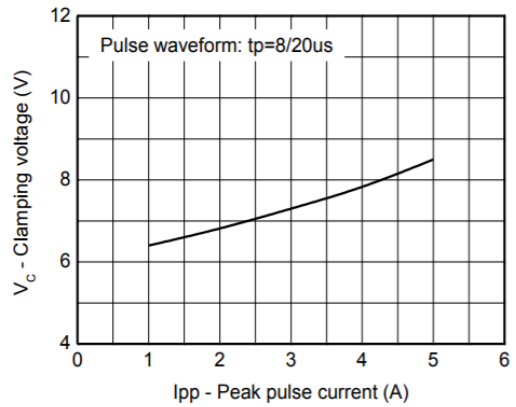
ELECTRICAL CHARACTERISTICS (Ta = 25 °C unless otherwise noted)

Symbol	Parameter	Conditions	Min	Typ	Max	Units
V _{RWM}	Reverse Working Peak Voltage				5.0	V
V _{BR}	Reverse Breakdown Voltage	I _T = 1mA	5.6		8.0	V
I _{R1}	Reverse Current	V _{RWM} = 5V			0.5	μA
I _{R2}	Reverse Current	V _R = 3.5V			0.3	μA
V _c	Clamping Voltage	I _{pp} = 1A			9.8	V
V _c	Clamping Voltage	I _{pp} = 5.5A			12.5	V
C	Capacitance	V _R = 0V, f = 1MHz			15	pF

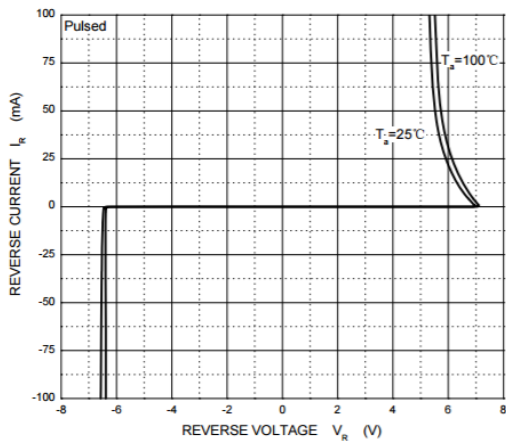
Typical Characteristics



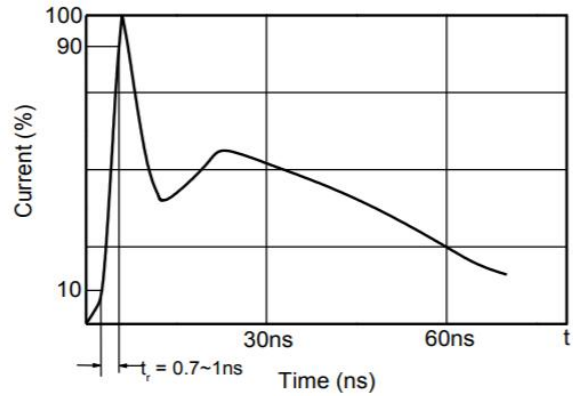
Pulse Waveform



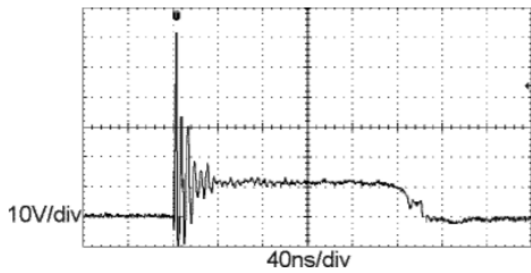
Clamping voltage vs. Peak pulse current



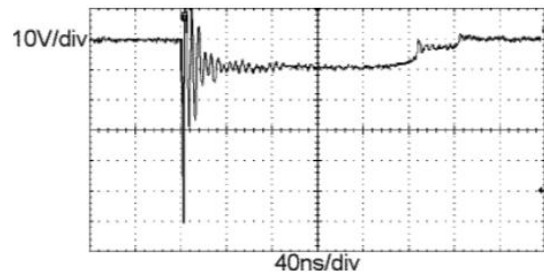
Reverse Characteristics



Contact discharge current waveform per IEC61000-4-2



**ESD clamping
(+8kV contact discharge per IEC61000-4-2)**



**ESD clamping
(-8kV contact discharge per IEC61000-4-2)**

ORDERING INFORMATION

Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
KPESD5V0B1BL	DFN1006	Tape & Reel 10000pcs /7" Reel	8mm	4mm	Conductive	

PACKAGE DIMENSIONS

