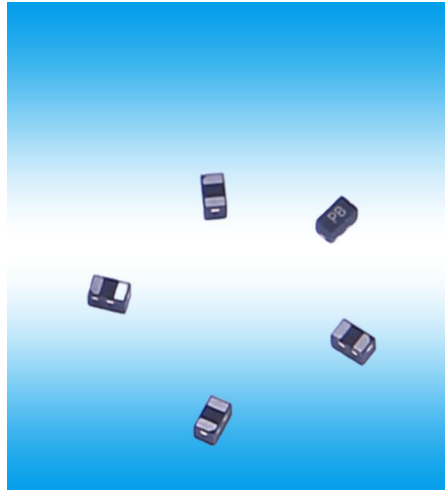


靜電保護元件ESD Protector

KESD0801PB



Description

KESD0801PB is a low-capacitance Transient Voltage Suppressor (TVS) designed to provide electrostatic discharge (ESD) protection for data, control or power lines. With typical capacitance of 8pF only, KESD0801PB is designed to protect parasitic-sensitive systems against over-voltage and over-current transient events.

KESD0801PB是一种低电容瞬态电压抑制器(TVS),旨在为数据、控制或电源线提供静电放电(ESD)保护。KESD0801PB的典型电容仅为8pF,用于保护对寄生敏感系统的过电压和过电流瞬态事件。

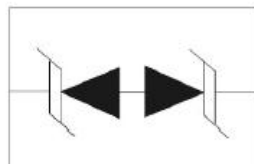
Features 产品特点

- Transient protection for high-speed data lines IEC 61000-4-2 (ESD) $\pm 15\text{kV}$ (Air)/ $\pm 8\text{kV}$ (Contact); IEC 61000-4-4 (EFT) 40A (5/50 ns); Cable Discharge Event (CDE)
高速数据线暂态保护 IEC 61000-4-2 (ESD) $\pm 15\text{kV}$ (Air)/ $\pm 8\text{kV}$ (接触); IEC 61000-4-4 (EFT) 40A (5/50ns); 电缆放电事件 (CDE)
- Package optimized for high-speed lines
适合高速线路的包装优化
- Protects one data, control or power line
保护一个数据, 控制线
- Ultra-small package (1.0mmX0.6mmX0.4mm)
超薄包装 (1.0毫米X0.6毫米X0.4毫米)
- Low capacitance: 0.5pF (Typical)
低电容: 0.5pF (典型)
- Low clamping voltage
低电压钳位
- Low leakage current
低泄漏电流

Applications 产品应用

- Portable Electronics
便携式电子设备
- Desktops, Servers and Notebooks
台式机、服务器和笔记本
- Subscriber Identity Module (SIM) card
用户识别模块 (SIM) 卡
- Cellular Phones
移动电话
- MP3 Ports
MP3接口
- Digital Ports
数据接口

CIRCUIT DIAGRAM



靜電保護元件ESD Protector

KESD0801PB

ABSOLUTE MAXIMUM RATING			
Symbol	Parameter	Value	Units
P _{PP}	Peak Pulse Power (8/20μs)	100	W
T _J	Operating Temperature	-55/+125	°C
T _{STG}	Storage Temperature	-55/+150	°C

ELECTRICAL CHARACTERISTICS (Tamb=25°C)						
Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V _{RWM}	Reverse Stand-Off Voltage				5.0	V
V _{BR}	Reverse Breakdown voltage	I _T =1mA	6.0			V
I _R	Reverse leakage current.	V _{RWM} =5V			1	μA
I _{PP}	Peak Pulse Current	t _p =8/20us			5	A
V _C	Clamping Voltage	I _{PP} =1A, t _p =8/20us I _{PP} =5A, t _p =8/20us		13	9.5 15	V
C _J	Junction Capacitance	V _R =0V,f=1MHz		8	15	pF

ELECTRICAL CHARACTERISTICS CURVE

Figure 1: Peak Pulse Power Vs Pulse Time

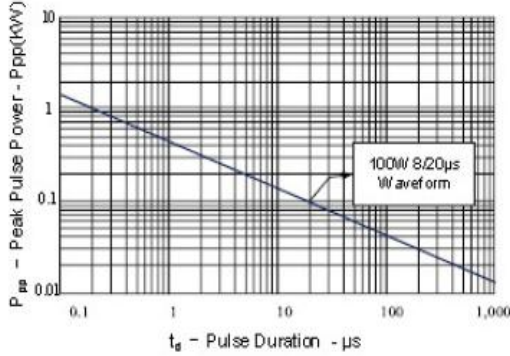


Figure 2: Power Derating Curve

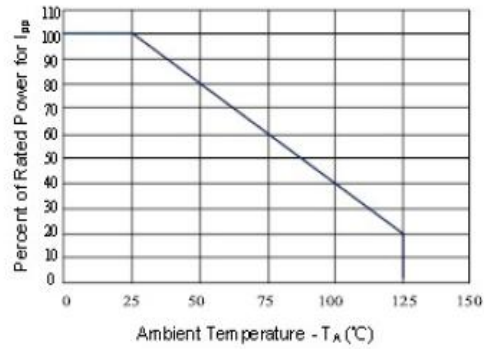


Figure 3: Clamping Voltage vs. Peak Pulse Current

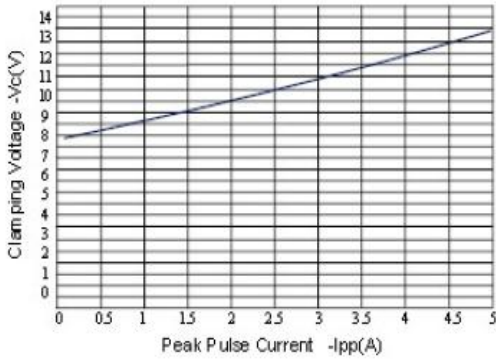


Figure 4: Normalized Junction Capacitance vs. Reverse Voltage

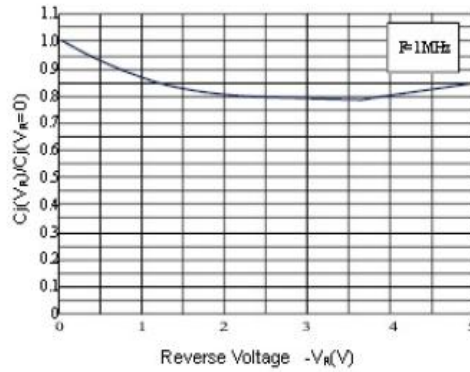


Figure 5: Pulse Waveform

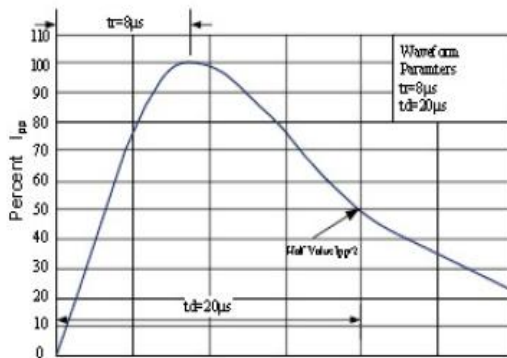


Figure 6: ESD Clamping(8kV Contact per IEC 61000-4-2)

