

靜電保護元件ESD Protector

KGBLCxxCI 系列



Description



The KGBLCxxCI Series are ultra low capacitance transient voltage suppressor arrays, designed to protect applications such as portable electronics and SMART phones. This series is available in both unidirectional and bidirectional configurations and is rated at 350 Watts for an 8/20 μ s waveshape.

KGBLCxxCI 系列是超低电容瞬态电压抑制阵列，用于保护便携式电子产品和智能手机等应用。该系列有单向和双向配置，额定功率为350瓦，波长为8/20伏安。

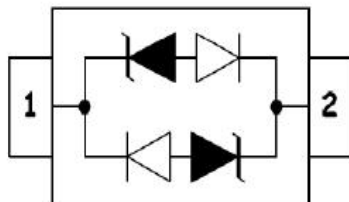
Features 产品特征

- ➔ IEC61000-4-2 (ESD) ± 15 kV (air), ± 8 kV (contact)
- ➔ IEC61000-4-4 (EFT) 40A (5/50 η s)
- ➔ IEC61000-4-5 (Lightning) 12A (8/20 μ s)
- ➔ Protects one I/O line (bidirectional)
保护一个I/O线(双向)
- ➔ Low clamping voltage
低电压钳位
- ➔ Low leakage current
低泄漏电流
- ➔ Working voltages : 3V, 5V, 8V, 12V, 15V, 24V
工作电压: 3V, 5V, 8V, 12V, 15V, 24V
- ➔ Response Time is < 1 ns
响应时间小于1 ns

Applications 产品应用

- ➔ Cell Phone Handsets and Accessories
手机及配件
- ➔ Microprocessor based equipment
基于微处理器的设备
- ➔ Personal Digital Assistants (PDA' s)
个人数码助理 (PDA)
- ➔ Notebooks, Desktops, and Servers
笔记本、台式机和服务器
- ➔ Portable Instrumentation
便携式仪器
- ➔ Peripherals, USB Interface
外围设备, USB接口

PIN CONFIGURATION



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KGBLCxxCI Series

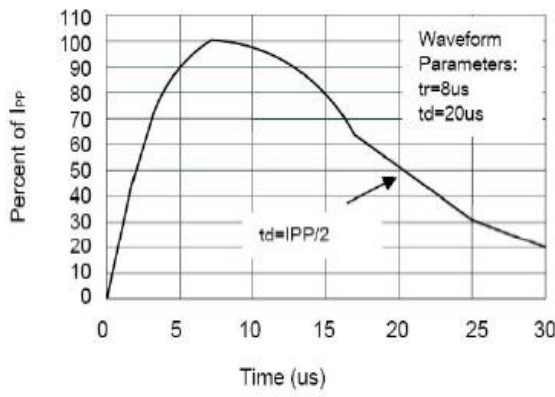
ABSOLUTE MAXIMUM RATING			
Symbol	Parameter	Value	Units
V_{ESD}	ESD per IEC 61000-4-2 (Air)	± 15	kV
	ESD per IEC 61000-4-2 (Contact)	± 8	
P_{PP}	Peak Pulse Power (8/20 μ s)	350	W
T_{OPT}	Operating Temperature	-55/+150	$^{\circ}$ C
T_{STG}	Storage Temperature	-55/+150	$^{\circ}$ C
T_L	Lead Soldering Temperature	260	$^{\circ}$ C

ELECTRICAL CHARACTERISTICS (Tamb=25 $^{\circ}$ C)										
PART NUMBER	DEVICE MARKING	V_{RWM}	$V_B@1mA$	$V_C@1A$	$V_C@I_{pp}$		$V_C@I_{pp}$		I_R (μ A)	C_T (pF)
		(V) Max	(V) Min	(V) Max	(V) Max	I_p (A)	(V) Max	I_{pp} (A)		
KGBLC03CI	CC	3.0	4.0	7.0	13.9	8	20.0	20	5	0.8
KGBLC05CI	AC	5.0	6.0	9.8	18.3	8	20.0	18	1	0.8
KGBLC08CI	BC	8.0	8.5	13.4	18.5	8	24.0	18	1	0.8
KGBLC12CI	DC	12.0	13.3	19.0	24.0	6	28.6	12	1	0.8
KGBLC15CI	EC	15.0	16.7	24.0	29.0	5	31.8	10	1	0.8
KGBLC24CI	HC	24.0	26.7	43.0	45.0	3	56.0	6	1	0.8

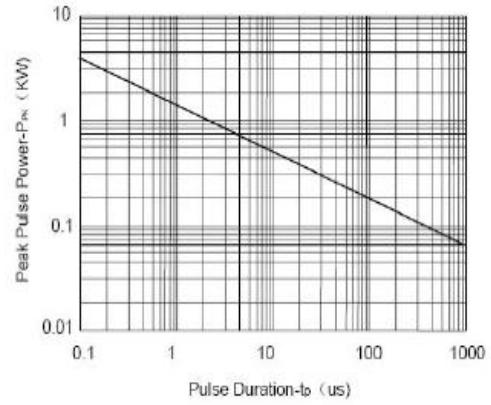
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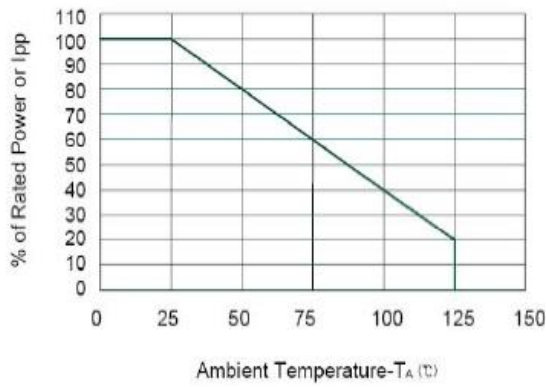
ELECTRICAL CHARACTERISTICS CURVE



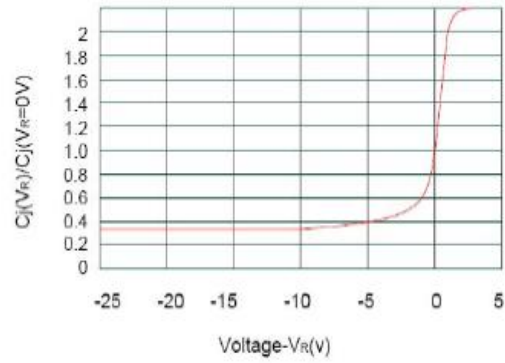
Pulse Waveform



Non-Repetitive Peak Pulse Power vs. Pulse Time



Power Derating Curve

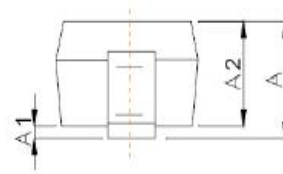
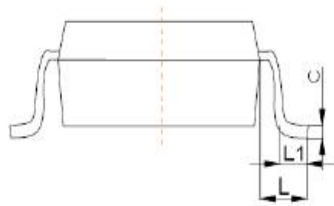
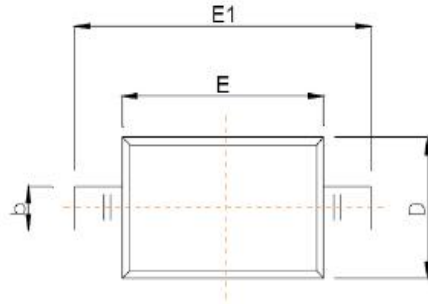


Junction Capacitance vs. Reverse Voltage

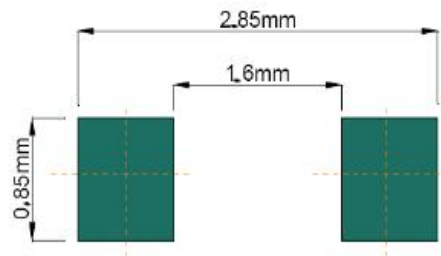
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PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters	
	Min	Max
A		1.00
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
e	1.800	2.040
L	0.475 REF	
L1	0.250	0.400
θ	0°	8°



Recommended Pad outline