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UNDER DEVELOPMENT

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6BLC1N5V8

Bi-Directional Low Capacitance TVS

Features

- Low Capacitance 13pF
- Small Chip Size 0.235*0.235mm
- High ESD Protection Level IEC61000-4-2(ESD) +/-20kV(Contact)
- Stand-off Voltage:5V
- Bi-Directional TVS

Applications

- Mobile phone
- Notebook
- LCD TV

Item	Characteristics
Wafer size	6inch
Chip size	235 * 235 um
Top metalization	Al-Si-Cu

Maximum Ratings (Ta=25degC)(*1)

Symbol	Parameter	Value	Units
P_{pk}	Peak Power Dissipation(tp=8/20us) (*1)	50	W
T_{stg}	Storage temperature Range	-55 to+150	Deg C
T_j	Maximum junction temperature	-55 to+125	Deg C
Ipp	Peak pulse current(t=8/20usec)	5	A
V_{pp}	Electrostatic discharge IEC61000-4-2 Contact Discharge	±20	kV

(*1) All Rating values for reference on a SOT-23 package configuration (front: Au wire 35um, back: Au eutectic), mounted on PCB of 1.5cm by 2.5cm.

Electrical Characteristics (Ta=25degC)

■Bi-Direction Use(*1)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Reverse stand-off voltage	V_{RWM}	-	-	5	V	
Leakage current	I_R	-	-	1	uA	V_{RWM} = 5.0V
Breakdown voltage	V_{BR}	5.8	7.5	8.5	V	I_R = 1mA
Clamping voltage1	Vc	-	-	7.5	V	Ipp=1A , tp=8/20us
Clamping voltage2	Vc	-	-	10	V	Ipp=5A , tp=8/20us
Capacitance	C	-	13	16	pF	V_R = 0V, f = 1MHz

*1 All values for reference on a SOT-23 package configuration
(front: Au wire 35um, back: Au eutectic)

Note

1. Assembly

Example: DFN0603

Bi-Directional TVS Use