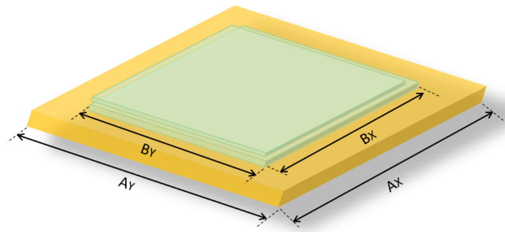
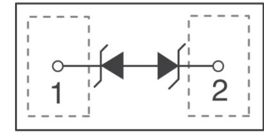
ESD5VLC1

Bi-directional ESD diode





Mechanical Data	Notes
Dice size	AX=AY:210um,BX=BY:85um
Wafer size	4”
Chip Thickness	138um±12um
Scribe line width	40um
Top metal	Al for wire bonding, d=2.2um±0.2um
Back side metal	Ti-Ni-Ag for soldering

Parameter	Symbol	Conditions	Value	Unit
Reverse stand-off voltage	V_{RWM}		5.0	V
Peak pulse power	P_{pp}	Tp=8/20us	35	W
Peak pulse current	I_{PP}	Tp=8/20us	2.0	A
Electrostatic discharge	V_{ESD}	IEC61000-4-2 Level 4	±15(AIR) ±8(Contact)	KV
Max.junction temp.	Tj		+150	℃

Characteristics TA=25℃

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Breakdown voltage	V_{BR}	I_T=1mA	5.6		9.4	V
Reverse leakage current	I_R	V_R=5V			0.09	uA
Clamping Voltage	V_C	I_{PP}=1A I_{PP}=2A			10.0 13.0	V
Diode capacitance pin1 to 2	Cj	V_R=0V f=1MHz		3.0	3.5	pf

Notes:
(1)sampling testing:no bad dice inking/guaranteed good die >93%
(2)Testing follow customer
(3)Tj=Ta+Rth(j-a)*(pf+pr),where Rth(j-a)-thermal resistance,Pf-forward power dissipation,
Pr-revers power dissipation
(4)**For device testing