



THE DATASHEET OF SFC1050



SFC5V650 Thru SFC1250 Flip Chip Zener Diode



Features

- Zener Voltage: 5.6V 6.2V 6.8V 10V 12V
- Case: WLCSP
- Space saving, low profile
- Very small dimensions: 1.0mm*0.6mm*0.28mm
- 20mA forward current
- 500mW Power dissipation

Circuit Diagram



Applications

- Voltage Regulation
- Voltage Reference
- Protection and Clamping

Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Nominal Power Dissipation	P_D	Derate above 25°C	500	mW
Forward Voltage	V_F	@ $I_F=10\text{mA}$, Pulse, $T_J=25^\circ\text{C}$	0.9	V
Operating Temperature Range	T_J	-	-55 to +150	°C
Storage Temperature Range	T_{stg}	-	-55 to +150	°C

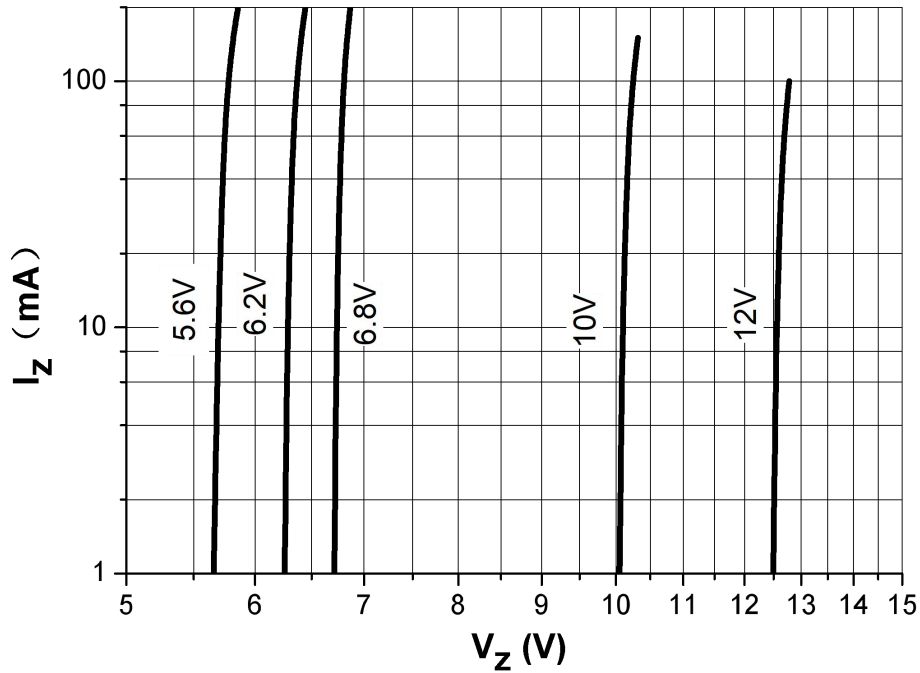
Electrical Characteristics @ $T_J=25^\circ\text{C}$:

Device	Zener voltage		Zener Impedance			Leakage Current	
	Nom. VZ ①	@ I_{ZT}	Max.	Max.	@ I_{ZK}	Max. I_R @ V_R	
			Z_{ZT} @ I_{ZT}	Z_{ZK} @ I_{ZK}		μA	Volts
	Volts	mA	Ω	Ω	mA	μA	Volts
SFC5V650	5.6	20	11	1600	0.25	5	3
SFC6V250	6.2	20	7	1000	0.25	5	4
SFC6V850	6.8	20	5	750	0.25	3	5
SFC1050	10	20	17	600	0.25	3	8
SFC1250	12	20	30	600	0.25	1	9.1

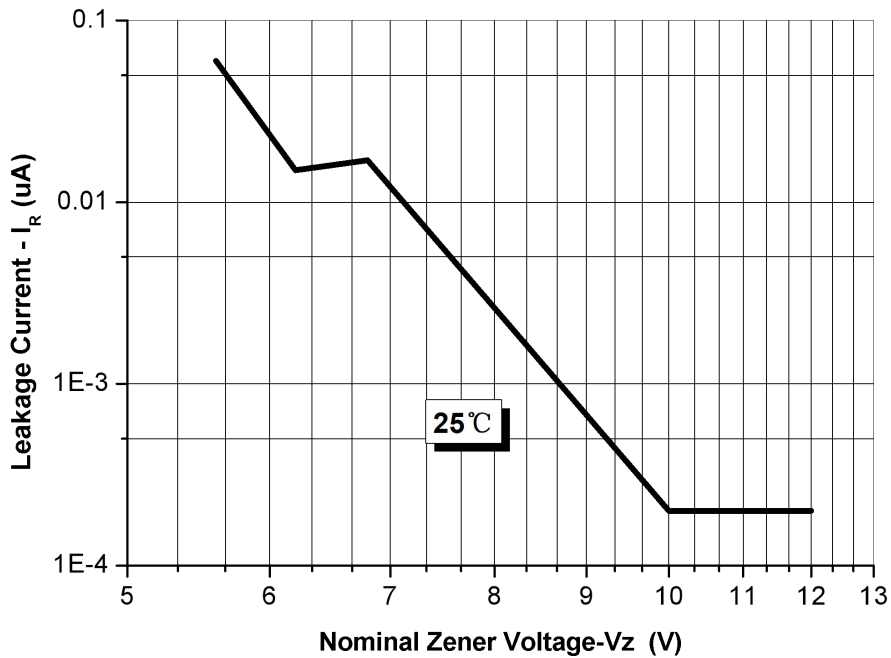
Note: ①Vz Tolerance is $\pm 5\%$

Ratings and Characteristics Curves

Breakdown Characteristics



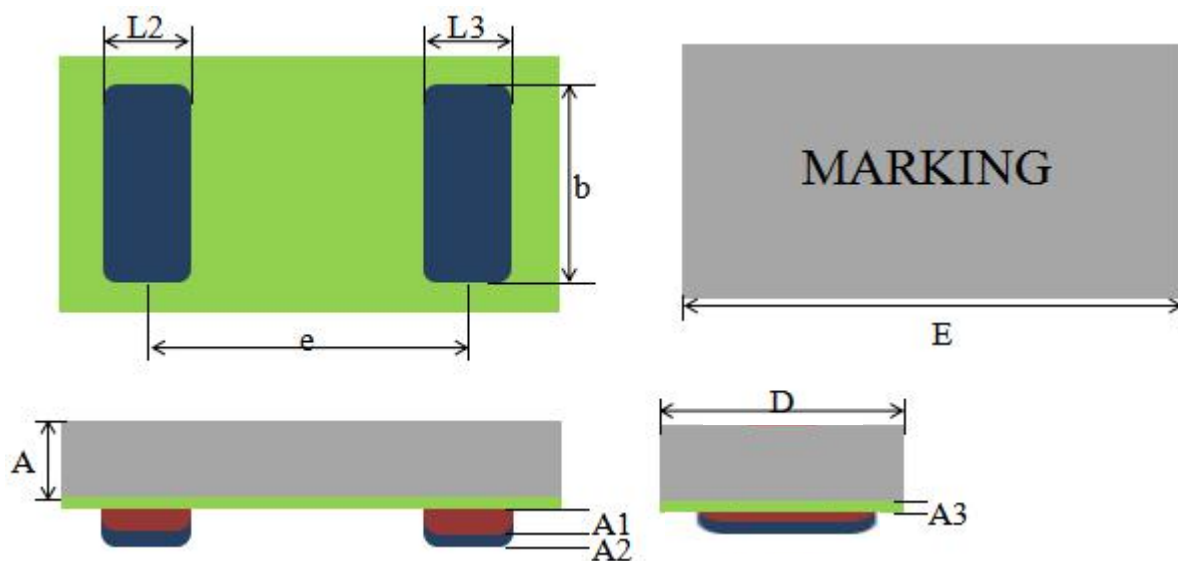
Typical Leakage



Ordering Information:

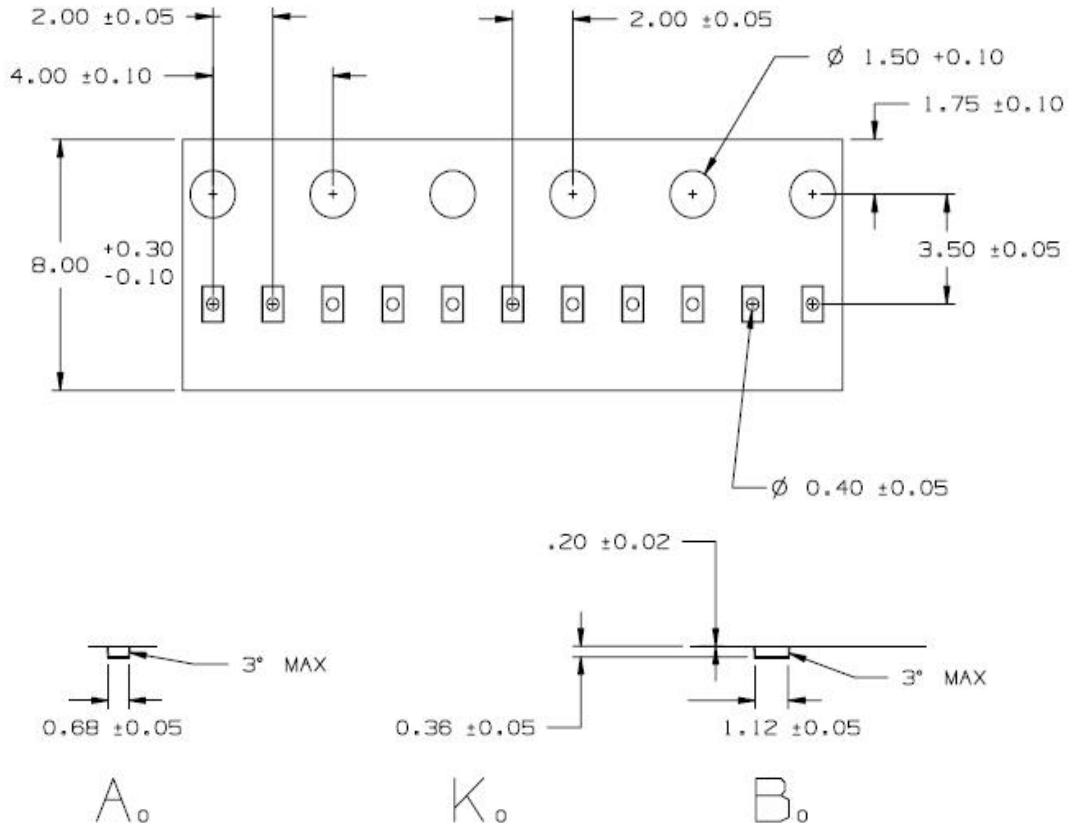
Device	Package	Plating	Shipping
SFC5V650-SFC1250	WLCSP	Cu+Sn	6000pcs/reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

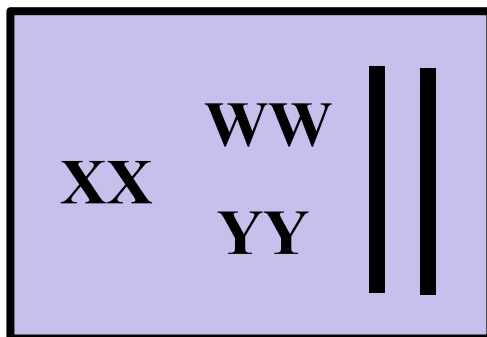
Mechanical Dimensions (in millimeters:WLCSP)


Item	Material	mechanical size(mm)		
		min	typ	max
A	Si	0.240	0.260	0.280
A1	Cu		0.008	
A2	Sn		0.003	
A3	PI	0.003	0.004	0.005
b			0.500	
L2		0.200	0.250	0.300
L3		0.200	0.250	0.300
e			0.650	
D		0.590		0.63
E		0.990		1.03

Carrier Tape and Reel Specification(in millimeters)



Marking Diagram



|| = cathode
 WW = week code
 YY = year code
 XX = device code

Where
 56 =SFC5V650
 62 =SFC6V250
 68 =SFC6V850
 10 =SFC1050
 12 =SFC1250

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