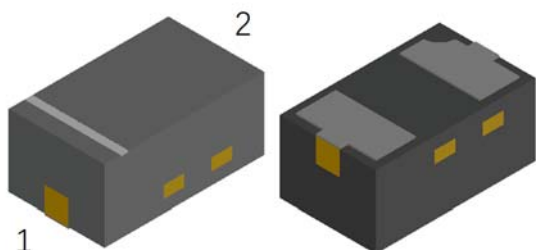


Small Signal Schottky Diode



Features

- Moisture sensitivity level 3
- Reverse voltage: 40V/30V/20V
- Average forward current: 200mA

Application

- High frequency and low voltage rectifier

Mechanical data

- **Package:** DFN1006-2L
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102

■ Maximum Ratings (T_a=25°C Unless otherwise specified)

Parameter	Symbol	Unit	Value	
Device marking code			SD103AL2	S4
			SD103BL2	S5
			SD103CL2	S6
Repetitive peak reverse voltage	V _{RRM}	V	SD103AL2	40
			SD103BL2	30
			SD103CL2	20
Forward current	I _F	mA	200	
Non-repetitive surge peak forward current @ t=8.3ms half-sine wave	I _{FSM}	A	1.5	
Repetitive Peak Forward Current@ tp=1ms, δ=0.25	I _{FRM}	A	1	
Power dissipation	P _D	mW	150	
Junction temperature	T _J	°C	-55 to +125	
Storage temperature	T _{STG}	°C	-55 to +125	



SD103AL2 THRU SD103CL2

RoHS
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■ Electrical Characteristics (T_a=25°C Unless otherwise specified)

Parameter	Symbol	Unit	Conditions		Min	Typ	Max
Reverse voltage	V _R	V	SD103AL2	IR=100uA	40		
			SD103BL2		30		
			SD103CL2		20		
Forward voltage	V _{F1}	V	I _F =20mA				0.37
	V _{F2}	V	I _F =200mA				0.6
Reverse voltage leakage current	I _R	uA	SD103AL2	V _R =30V			5
			SD103BL2	V _R =20V			
			SD103CL2	V _R =10V			
Capacitance	C _j	pF	V _R =0V,f=1MHz				50
Reverse recovery time	T _{rr}	ns	I _F =I _R =10mA, I _{rr} =1mA, R _L =100Ω				5

■ Thermal Characteristics

Parameter	Symbol	Unit	Value
Thermal resistance, junction-to-ambient	R _{θJ-A} ⁽¹⁾	°C/W	667
Thermal resistance, junction-to-case	R _{θJ-C} ⁽¹⁾	°C/W	533

Note:

(1) Thermal resistance from junction to ambient and from junction to case mounted on P.C.B. with 17mm*10mm copper pad areas



■ Characteristics

Fig 1: P_D -Ta Curve

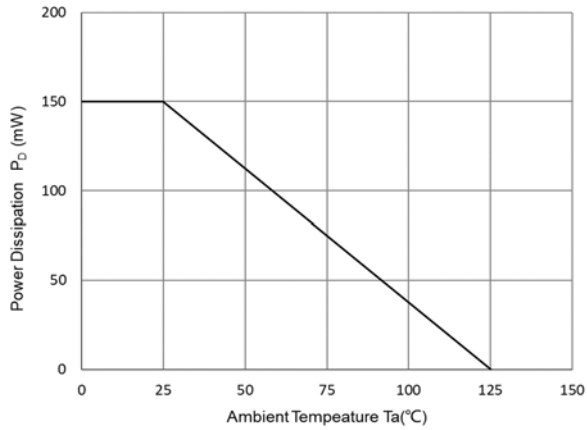


Fig 2: Capacitance Capability

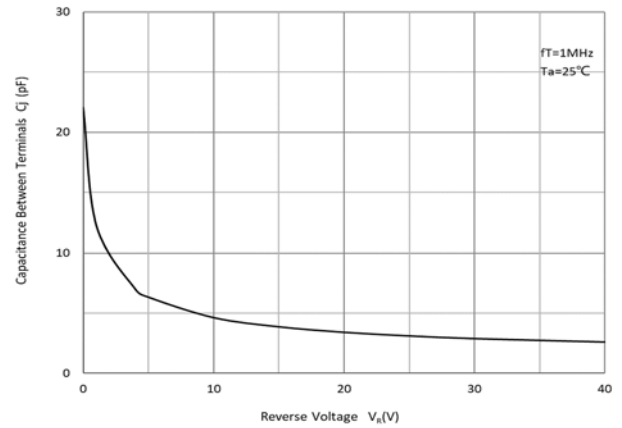


Fig 3: Typical Forward Characteristics

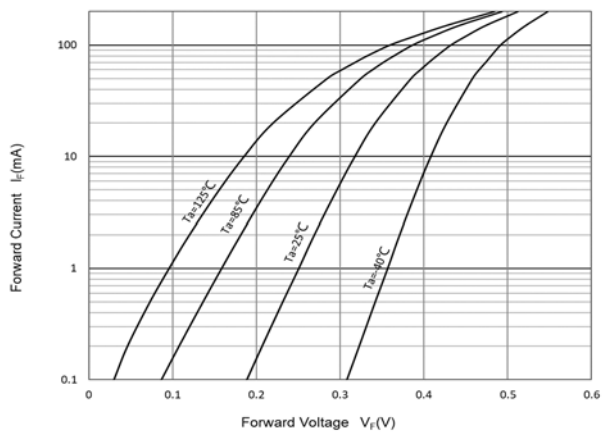
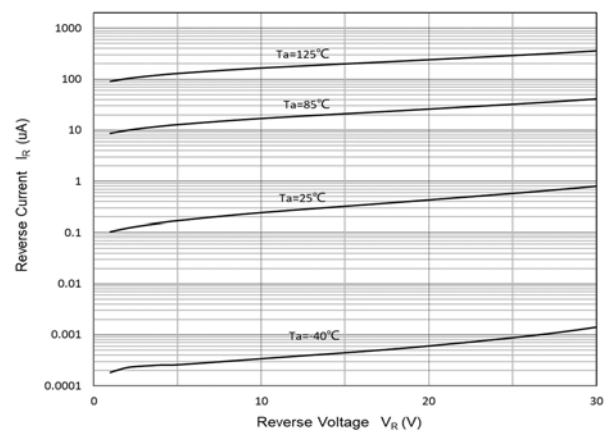


Fig 4: Typical Reverse Characteristics





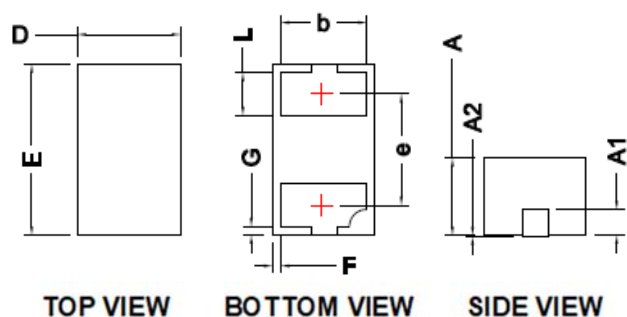
SD103AL2 THRU SD103CL2

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■ Ordering Information

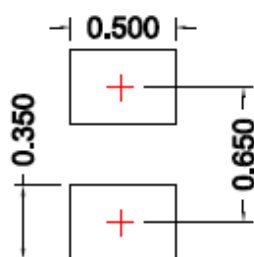
Preferred P/N	Packing code	Unit weight(mg)	Minimum package(pcs)	Inner box quantity(pcs)	Outer carton quantity(pcs)	Delivery mode
SD103AL2 THRU SD103CL2	F1	Approximate 0.9	10000	100000	400000	Tape & Reel

■ Outline Dimensions



SYMBOL	MILLIMETER		
	MIN	NOM	MAX
D	0.50	0.60	0.70
E	0.90	1.00	1.10
A	0.35	0.45	0.55
A1	0.15 BSC		
A2			0.10
F	0.005		
G	0.005		
L	0.15	0.25	0.35
b	0.41	0.50	0.59
e	0.65 BSC		

■ Suggested Pad Layout



UNIT: mm



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