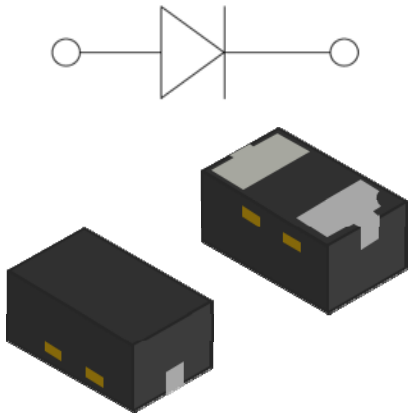
High Speed Switching Diode



DFN1006-2L-SWF

Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- V_{RRM} 100V
- I_{FAV} 100mA
- Part no. with suffix “Q” means AEC-Q101 qualified

Applications

- Extreme fast switches
- Automotive

Mechanical Data

- **Case**: DFN1006-2L-SWF
- **Terminals**: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** M8 %

■ Maximum Ratings (Ta=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	CONDITIONS	VALUE
Repetitive Peak Reverse Voltage	V_{RRM}	V		100
Average Forward Current	I_{FAV}	mA		100
Peak Forward Surge Current	I_{FSM}	A	tp_p=1ms, square wave tp=1s, square wave	1 0.5
Power Dissipation	P_{tot}	mW		150
Thermal Resistance Junction To Ambient air	R_{thJA}	K/W		825
Junction Temperature	T_j	℃		-55 to +150
Storage Temperature Range	T_{stg}	℃		-55 to +150

■ Electrical Characteristics（T_a=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	CONDITIONS	MIN	MAX
Forward Voltage	V_F	V	I_F=1mA		0.715
			I_F=10mA		0.855
			I_F=50mA		1.0
			I_F=150mA		1.25
Reverse Current	I_R	nA	V_R=25V		30
	I_R	μA	V_R=80V		0.5
Reverse Breakdown Voltage	V_{BR}	V	I_R=100μA	100	
Junction Capacitance	C_j	pF	V_R=V_F=0V, f =1MHz		1.5
Reverse Recovery Time	t_{rr}	ns	I_F=I_R=50mA,I_{rr}=0.1I_R,R_L=100Ω		5

■ Ordering Information (Example)

PREFERED P/N	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAS16LSHQ	Approximate 0.0009	10K	100K	400K	Tape & Reel

■ Characteristics (Typical)

Fig.1: P_D-T_A

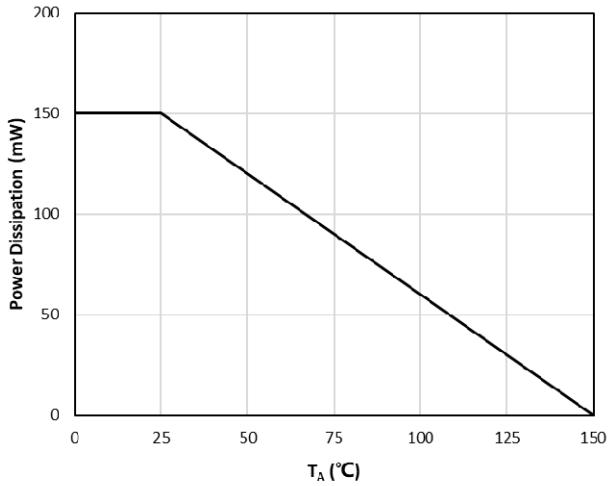


Fig.2: Capacitance Characteristic

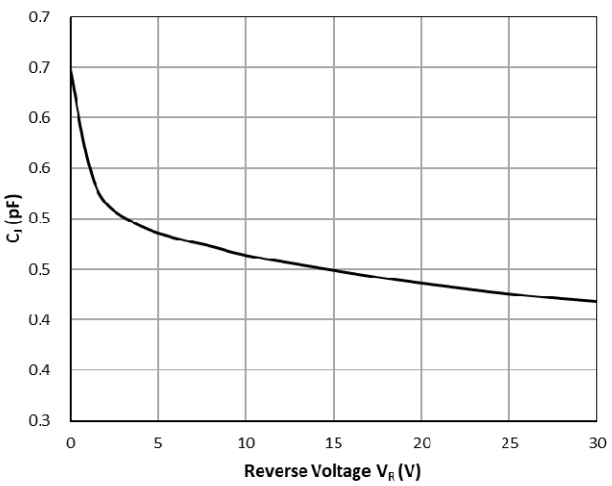


Fig.3: Forward Characteristic

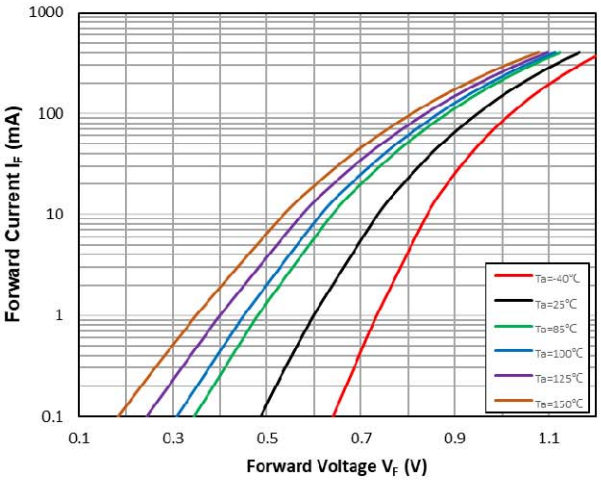
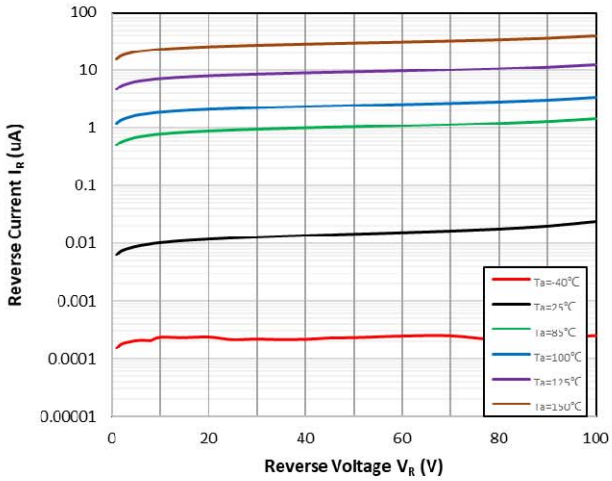
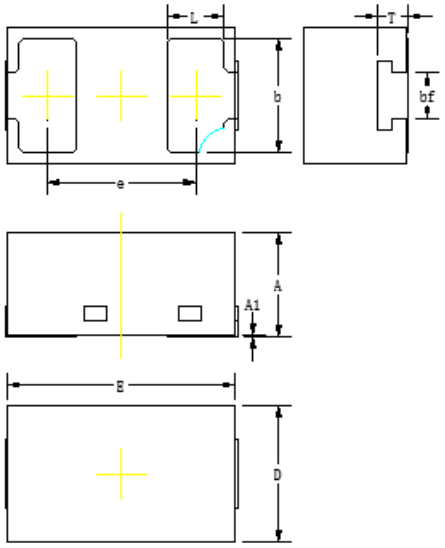


Fig.4: Reverse Characteristics



■ Outline Dimensions



SYMBOL	MILLIMETER		
	MIN	NOM	MAX
A	0.4200	0.4700	0.5200
A1	0.0000		0.1000
bf	REF. 0.20		
b	0.4100	0.5000	0.5900
D	0.5000	0.6000	0.7000
E	0.9000	1.0000	1.1000
e	REF. 0.65		
L	0.1500	0.2500	0.3500
T	0.1000	0.1600	0.2200

■ Marking Information

Note:
1. All marking is at middle of the product body
2. All marking is in laser marking
3. Body color: Black
4. M8 is Marking Code
5. % is a date code, rotated 90° counterclockwise

*Date Code vary depending upon production date

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