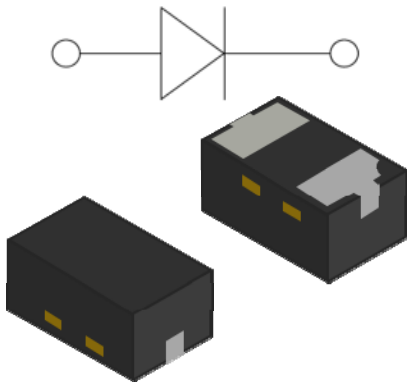


## Small Signal Switching Diode



**DFN1006-2L-SWF**

### Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- $V_{RRM}$  120V to 200V
- Part no. with suffix "Q" means AEC-Q101 qualified

### Applications

- For General Purpose Switching Applications
- 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

### ■ Maximum Ratings ( $T_a=25^\circ\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Conditions	Part	Value
Reverse Voltage	$V_R$	V		BAS19LSQ	100
				BAS20LSQ	150
Repetitive Peak Reverse Voltage	$V_{RRM}$	V		BAS19LSQ	120
				BAS20LSQ	200
Average Forward Current	$I_{FAV}$	mA			150
Non-Repetitive Peak Forward Surge Current,	$I_{FSM}$	A	Half-sine wave 8.3ms		1
Power Dissipation	$P_D$	mW			150
Thermal Resistance Junction to Ambient	$R_{thJA}$	$^\circ\text{C}/\text{W}$			833
Operation Junction Temperature	$T_J$	$^\circ\text{C}$			-55 to +150
Storage Temperature	$T_{STG}$	$^\circ\text{C}$			-55 to +150



## BAS19LSQ THRU BAS20LSQ

### ■ Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

Item	Symbol	Unit	Conditions		MIN	MAX
Reverse Voltage	V <sub>R</sub>	V	BAS19LSQ	I <sub>R</sub> =100uA	100	
			BAS20LSQ	I <sub>R</sub> =100uA	150	
Forward Voltage	V <sub>F</sub>	V	I <sub>F</sub> =100mA, T <sub>J</sub> =25°C			1.0
			I <sub>F</sub> =200mA, T <sub>J</sub> =25°C			1.25
Reverse Current	I <sub>R</sub>	nA	BAS19LSQ	V <sub>R</sub> =100V		100
			BAS20LSQ	V <sub>R</sub> =150V		100
Typical Junction Capacitance	C <sub>J</sub>	pF	f=1.0MHz, V <sub>R</sub> =0V			5
Reverse Recovery Time	T <sub>rr</sub>	ns	I <sub>F</sub> =30mA, I <sub>R</sub> =30mA, R <sub>L</sub> =100Ω, I <sub>r</sub> =3mA			50

### ■ Ordering Information (Example)

PREFERRED P/N	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAS19LSQ THRU BAS20LSQ	Approximate 0.0009	10K	100K	400K	Tape & Reel



# BAS19LSQ THRU BAS20LSQ

## ■ Characteristics (Typical)

Fig.1: PD-Ta Curve

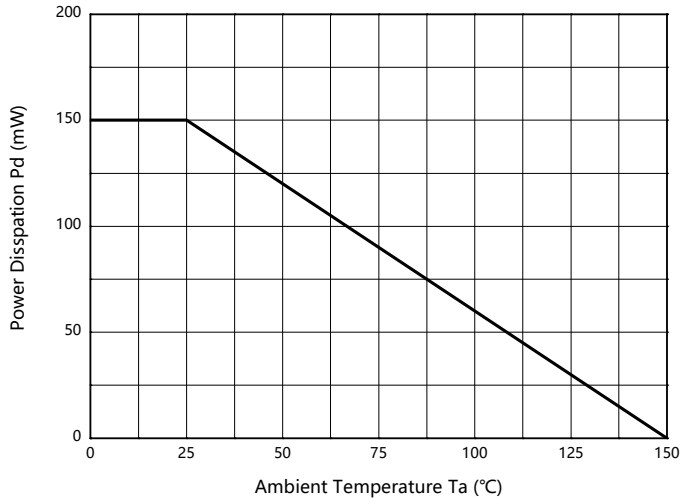


Fig.2: Capacitance Characteristics

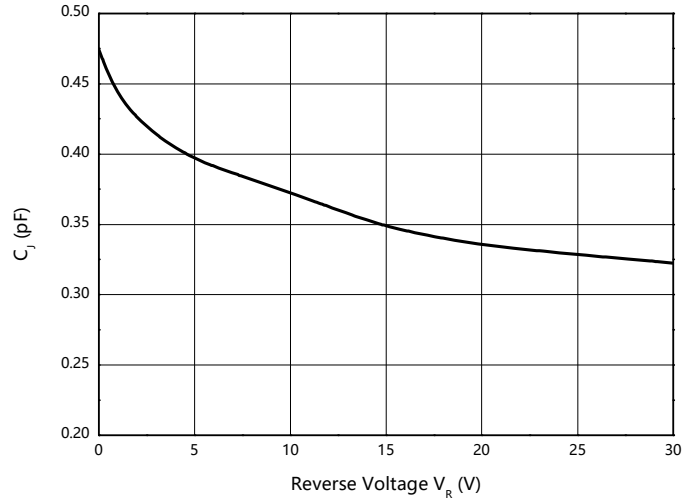


Fig.3: Forward Characteristics

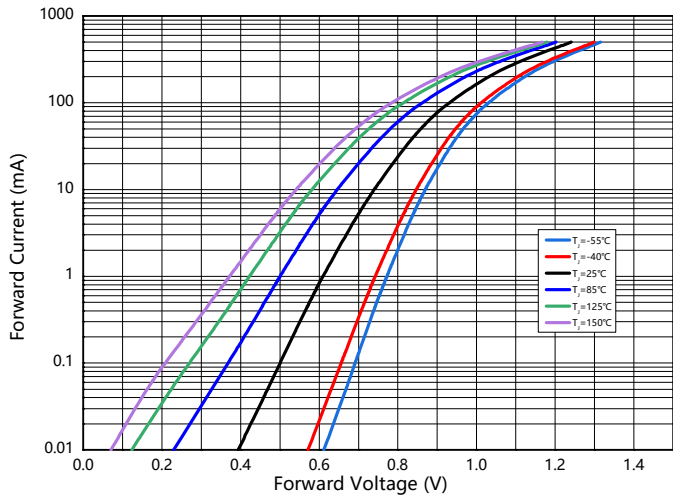
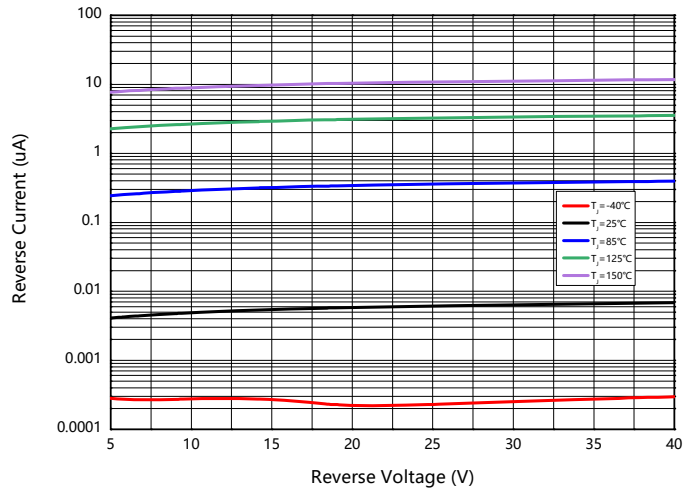


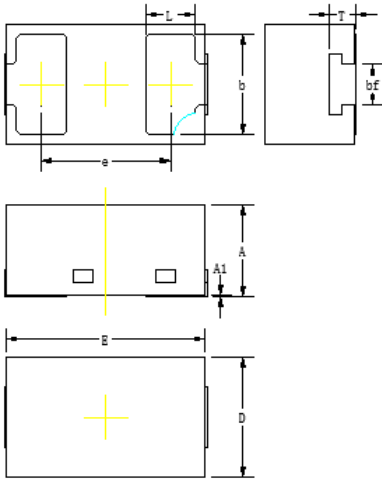
Fig.4: Reverse Characteristics





## BAS19LSQ THRU BAS20LSQ

### ■ 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



PN	Marking Code
BAS19LSQ	J1
BAS20LSQ	J2

#### Note:

1. All marking is at middle of the product body
2. All marking is in laser marking
3. Body color: Black
4. XX is Marking Code



## BAS19LSQ THRU BAS20LSQ

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