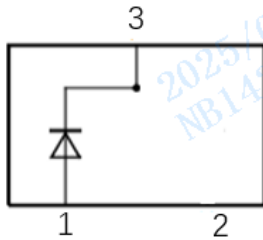


Small Signal Switching Diode



Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- V_R 40V
- I_F 120mA
- Part no. with suffix "Q" means AEC-Q101 qualified

Applications

- General Purpose Switches Diodes
- Automotive

Mechanical Data

- **Case:** DFN1412-3L-SWF
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102

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

PARAMETER	SYMBOL	UNIT	CONDITIONS	VALUE
Reverse Voltage	V_R	V		40
Forward Current	I_F	mA		120
Peak Forward Surge Current	I_{FSM}	A	$t=8.3\text{ms}$	1
Power Dissipation	P_{tot}	mW		150
Thermal Resistance Junction to Ambient	R_{thJA}	$^\circ\text{C}/\text{W}$		833
Junction Temperature	T_j	$^\circ\text{C}$		-55 to +150
Storage Temperature Range	T_{stg}	$^\circ\text{C}$		-55 to +150

■ Electrical Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	CONDITIONS	MIN	MAX
Forward Voltage	V_F	V	$I_F=1\text{mA}$		0.38
			$I_F=40\text{mA}$		1
Reverse Current	I_R	μA	$V_R=30\text{V}$		0.2
Reverse Breakdown Voltage	V_{BR}	V	$I_R=10\mu\text{A}$	40	
Junction Capacitance	C_J	pF	$V_R=0\text{V}, f=1\text{MHz}$		5
Reverse Recovery Time	t_{rr}	ns	$I_F=I_R=10\text{mA}, I_{rr}=1\text{mA}, R_L=100\Omega$		7



BAS40QCHQ

Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAS40QCHQ	F1	Approximate0.0025	3K	30K	120K	7" reel

Characteristics (Typical)

Fig.1: PD-Ta Curve

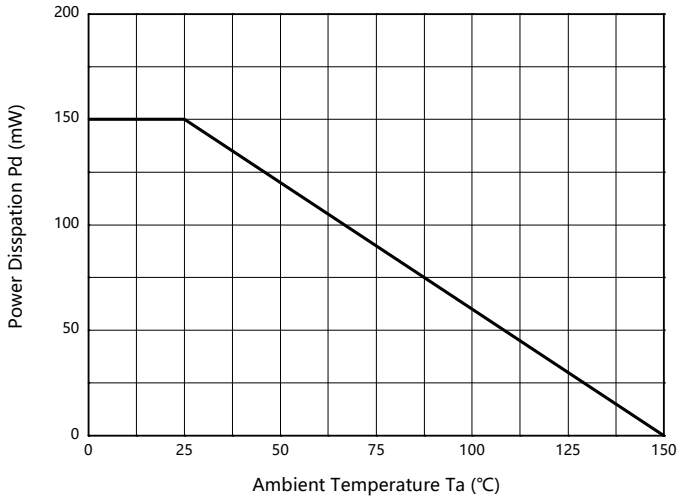


Fig.2: Capacitance Characteristics

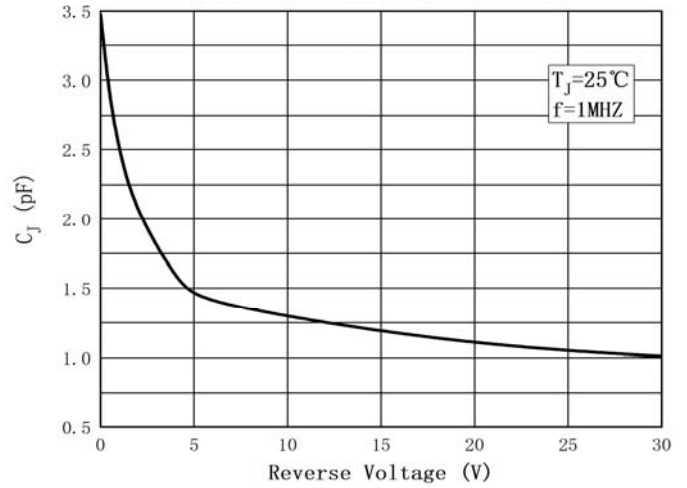


Fig.3: Forward Characteristics

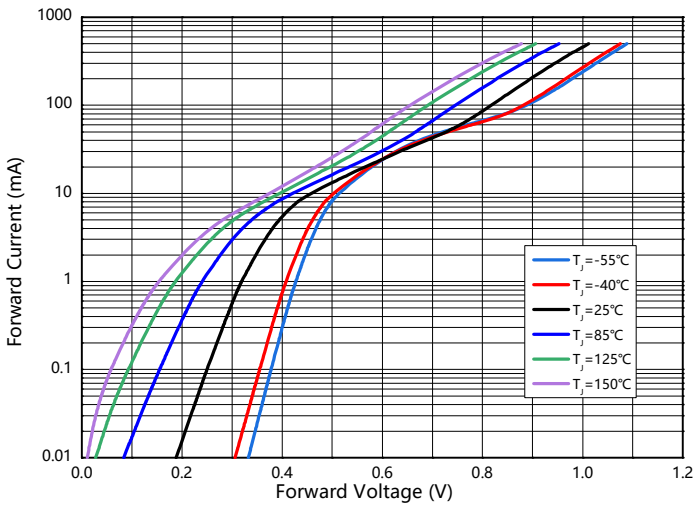
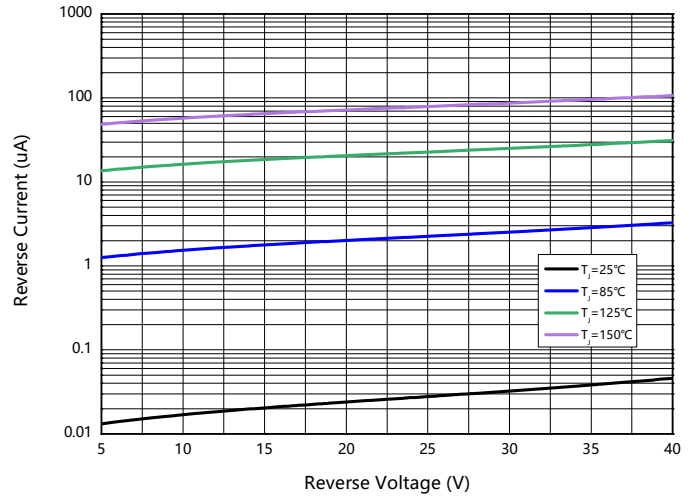


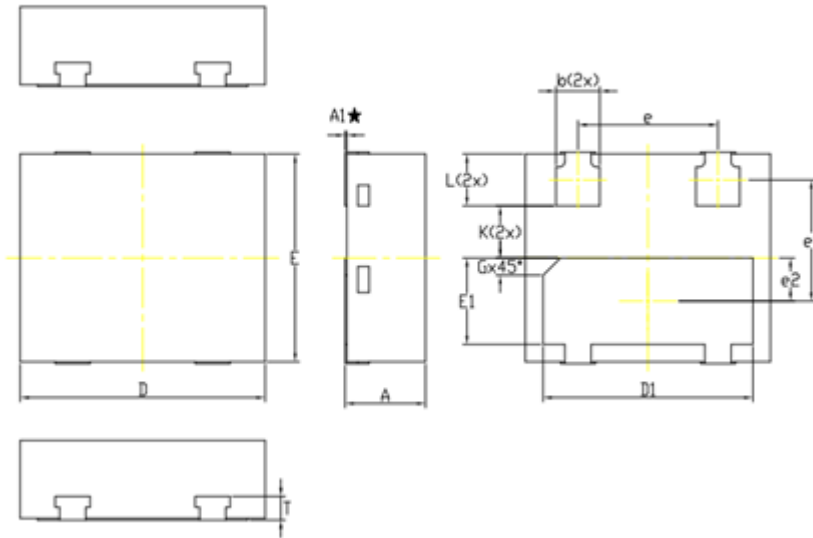
Fig.4: Reverse Characteristics





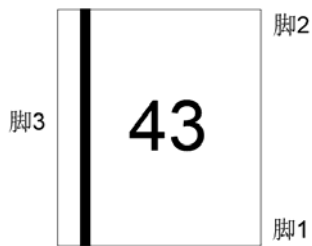
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■ Outline Dimensions



SYMBOL	MILLIMETER		
	MIN	NOM	MAX
A	0.4100	0.4600	0.5100
A1	0.0050	0.0100	0.0400
b	0.2000	0.2500	0.3000
D	1.3000	1.4000	1.5000
D1	1.1500	1.2000	1.2500
E	1.1000	1.2000	1.3000
E1	0.4500	0.5000	0.5500
e	\	0.8000	\
e1	\	0.7000	\
e2	\	0.2500	\
G	\	0.1(REF)	\
K	0.2500	\	\
L	0.2500	0.3000	0.3500
T	0.1000	0.1400	0.2200

■ Marking Information



Note:

1. All marking is at middle of the product body
2. All marking is in laser marking
3. 43 is Marking Code
4. Body color: Black



BAS40QCHQ

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