



## Small Signal Schottky Diode

### Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- $V_R$  30V
- $I_{FAV}$  200mA
- Part no. with suffix "Q" means AEC-Q101 qualified

### Applications

- For low-loss, fast-recovery, meter protection, bias isolation and clamping application
- Low Forward Voltage Drop

### Mechanical Data

Case: SOD523

### Maximum Ratings ( $T_a=25$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	CONDITIONS	VALUE
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	V		30
Average forward current	$I_{DFC}$		-55 to +125	

Storage temperature range	$T_{stg}$	°C		-55 to +150
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### Electrical Characteristics $T_a=25$ Unless otherwise specified

PARAMETER	SYMBOL	UNIT	CONDITIONS	Min	Typ	Max
Forward Voltage	$V_F$	V	$I_F=0.1mA$		0.20	0.24
			$I_F=1mA$		0.26	0.32
			$I_F=10mA$		0.33	0.4
			$I_F=30mA$		0.40	0.5
			$I_F=100mA$		0.50	1.0
Reverse Current	$I_R$	uA	$V_R=25V$		0.35	2
Reverse Breakdown Voltage	$V_{BR}$	V	$I_R=100uA$	30	47	
Typical Junction Capacitance	$C_J$	pF	$V_R$			



## Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAT54XV2Q	F2	Approximate 0.002	8000	80000	320000	7" reel

## Characteristics (Typical)

Fig.1:  $P_D - T_A$

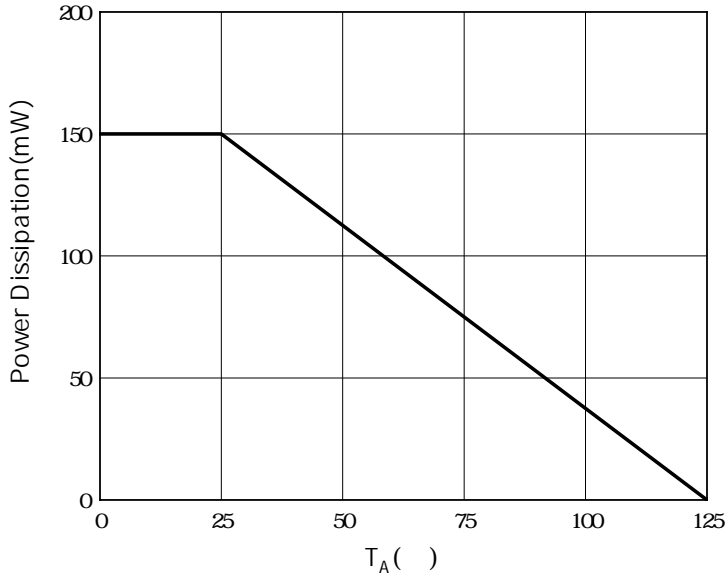


Fig.2: Capacitance Characteristics

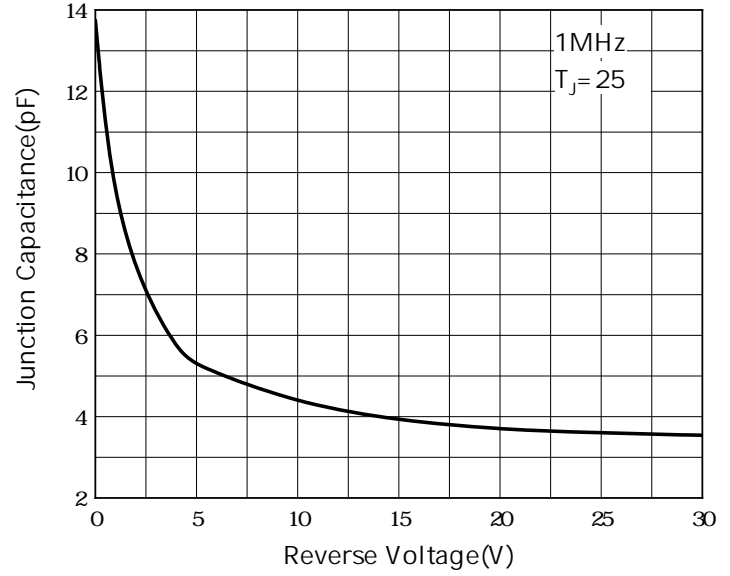
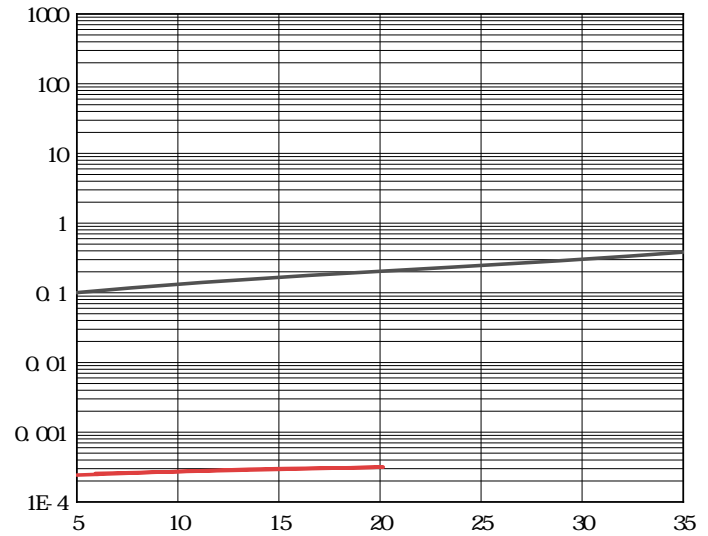
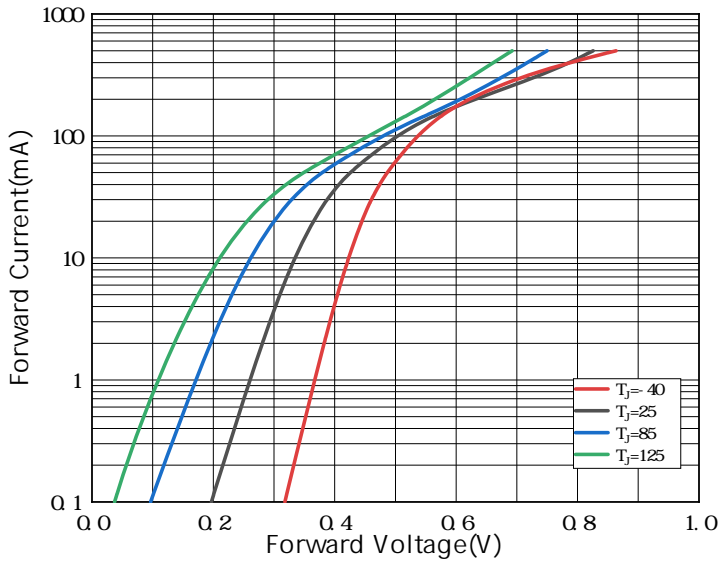
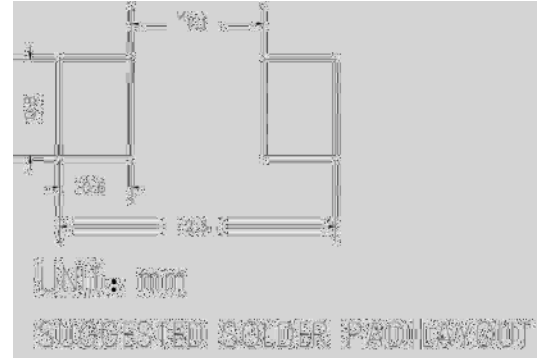
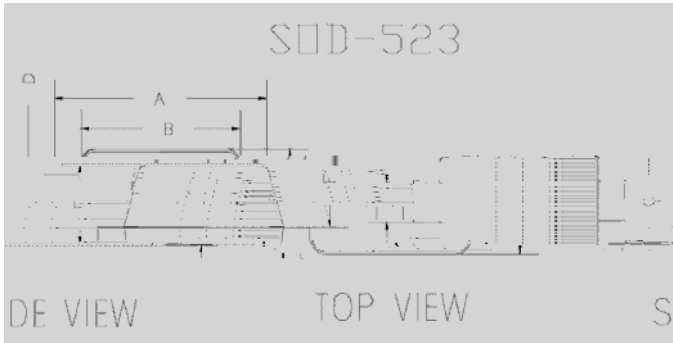


Fig.3: Forward Characteristics

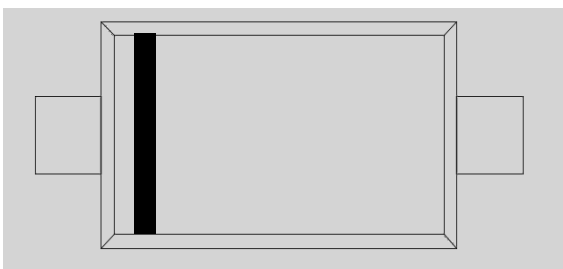


## Outline Dimensions



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.059	0.067	1.500	1.700
B	0.043	0.051	1.100	1.300
C	0.035	0.700	0.900	0.028
D	0.0141	0.250	0.350	0.010
E	0.008	0.050	0.200	0.008
F	0.008	0.000	0.000	0.000

## Marking Information



**Note:**

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



## Disclaimer

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