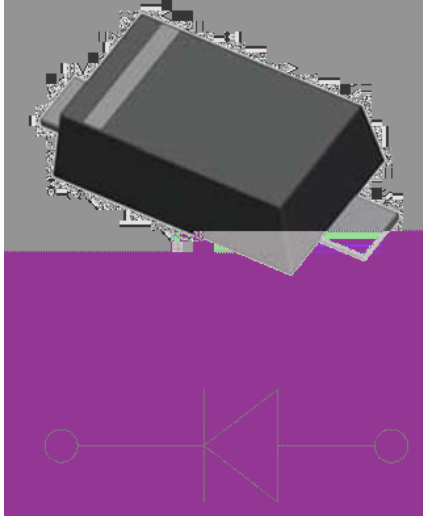


BAS521Q

Small-Signal Switching Diodes



Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- V_{RRM} 250V
- I_{FAV} 200mA
- Part no. with suffix "Q" means AEC-Q101 qualified

Typical Applications

- General Purpose Switches Diodes
- Automotive

Mechanical Data

- Package:** SOD523
- Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity:** Cathode line denotes the cathode end
- Marking:** JS

Maximum Ratings (Ta=25 - Unless otherwise specified Å

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Thermal Resistance Junction to Ambient	$R_{thJA}^{(1)}$	K/W		833
Power dissipation	P_D	mW		150
Junction temperature range	T_J	-		-55 to +150
Storage temperature range	T_{stg}	-		-55 to +150

(1) Device mounted on an FR4 PCB (1.0 x 1.0 x 0.06 inch), single-sided copper, tin-plated and standard footprint.

Electrical Characteristics ÅTa=25 - Unless otherwise specified Å

PARAMETER	SYMBOL	UNIT	Conditions	Min	Max
Forward voltage	V_F	V	$I_F=100mA$		1.1
Reverse current	I_R	nA	$V_R=250V$		150
Breakdown voltage	V_R	V	$I_R=100uA$	250	
Diode capacitance	C_D	pF	$V_R=0V, f=1MHz$		5
Reverse recovery time	t_{rr}	ns	$I_F=30mA, I_{rr}=0.1I_R, R_L=100$		50



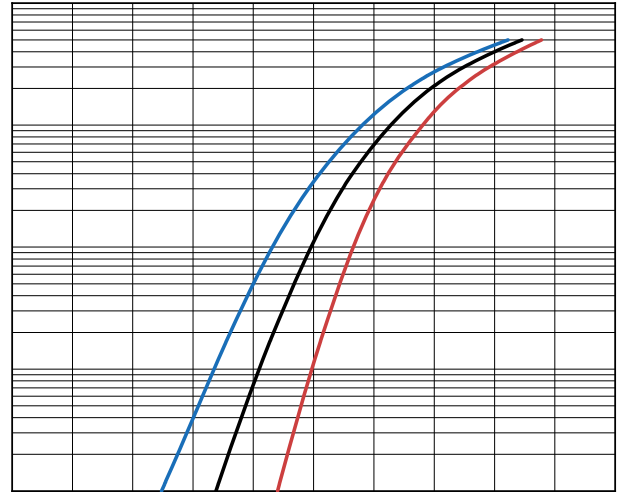
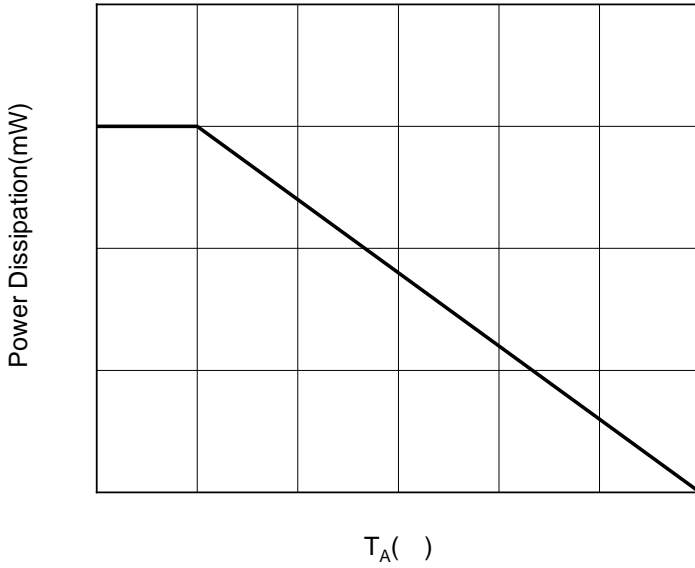
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Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAS521Q	F2	Approximate 0.002	8000	80000	320000	7" reel

Characteristics(Typical)

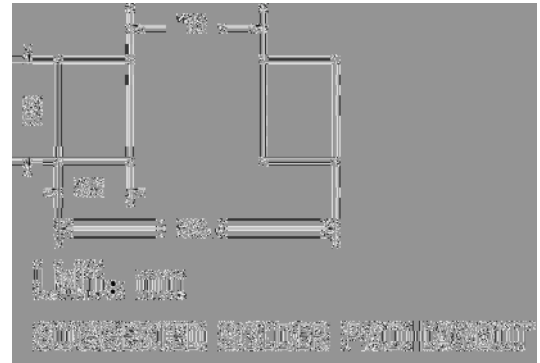
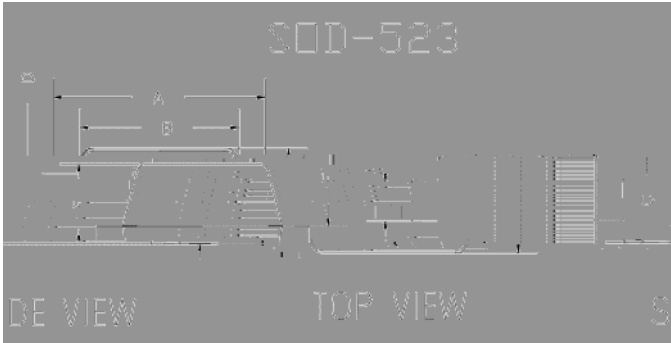
Fig.1: P_D-T_A





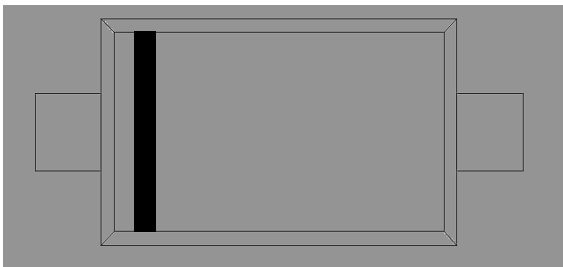
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Outline Dimensions



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	0.900	0.900	0.028	0.035
D	0.350	0.350	0.010	0.014
E	0.200	0.200	0.002	0.008
F	0.280	0.280	0.028	0.010

Marking Information



Note:

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

BAS521Q
