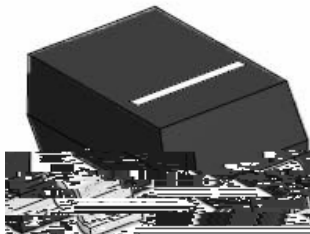


High Speed Switching Diode

Features

- X Epoxy meets UL - 94 V - 0 flame rating and halogen free
- X Moisture Sensitivity Level 1
- X V_R 75 V
- X I_{FAV} 150 mA
- X Part no. with suffix 0 means AEC - Q101 qualified



“

Mechanical Data

- X Case: SOD123
- X Terminals: Tin plated leads, solderable per J - STD - 002 and JESD22 - B102
- X Polarity: Cathode line denotes the cathode end

SOD123

Maximum Ratings (T_a = 25 °C)

PARAMETER	SYMBOL	UNIT	CONDITIONS	VALUE
RMS Reverse Voltage	V _{R(RMS)}	V		75
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage	V _{RRM} V _{RWM}	V		100
DC Blocking Voltage	V _R	V		75
Average Forward Current	I _{FAV}	mA		150
Repetitive Peak Forward Current	I _{FRM}	mA		300
Peak Forward Surge Current	I _{FSM}	A	Pulse width = 1 us Pulse width = 1 s	2 1
Power Dissipation	P _{tot}	mW		400
Thermal Resistance Junction to Ambient	R _{thJA}	K/W		315
Maximum Junction Temperature	T _J			-55 to +150
Storage Temperature Range	T _{stg}			-55 to +150



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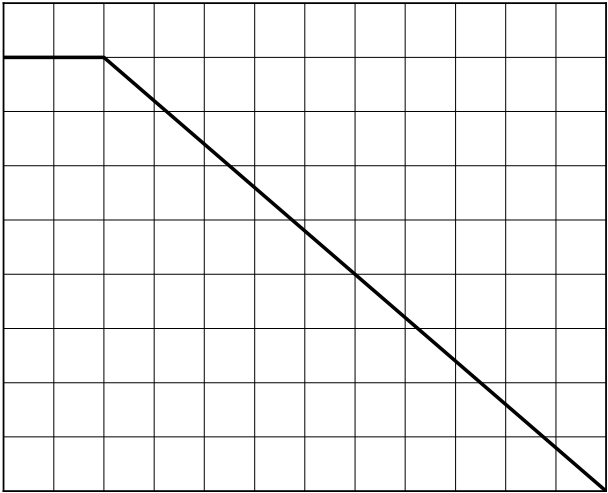
Electrical Characteristics

PARAMETER	SYMBOL	UNIT	CONDITIONS	MIN	MAX
Forward Voltage	VF	V	IF = 1mA		0.715
			IF = 10 mA		0.855
			IF = 50 mA		1.0
			IF = 150 mA		1.25
Reverse Current	IR	μA	VR = 20 V		0.025
			VR = 75 V		1.0
Breakdown Voltage	VZ	V	IR = 10 μA	7.5	
Diode Capacitance	GD	pF	VR = 0 V, f = 1MHz		4
Reverse Recovery Time	trr	ns	IF = 10 mA, IRR = 0.1 mA		4

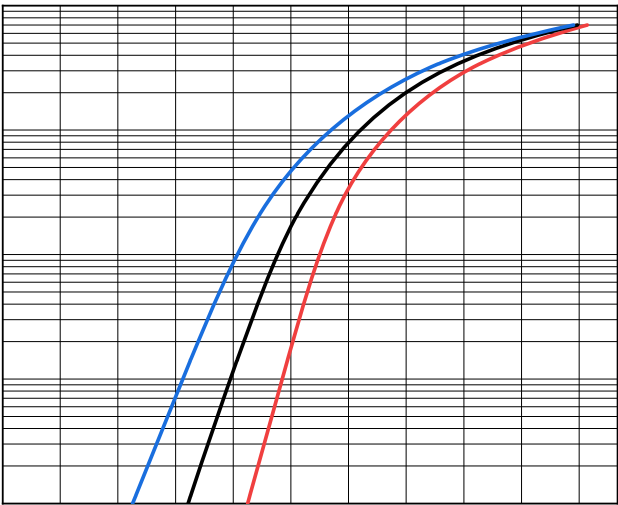


ΩCharacteristics (Typical)

) L J . 3_§



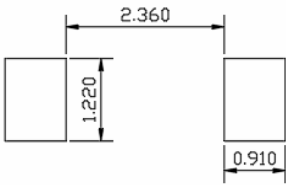
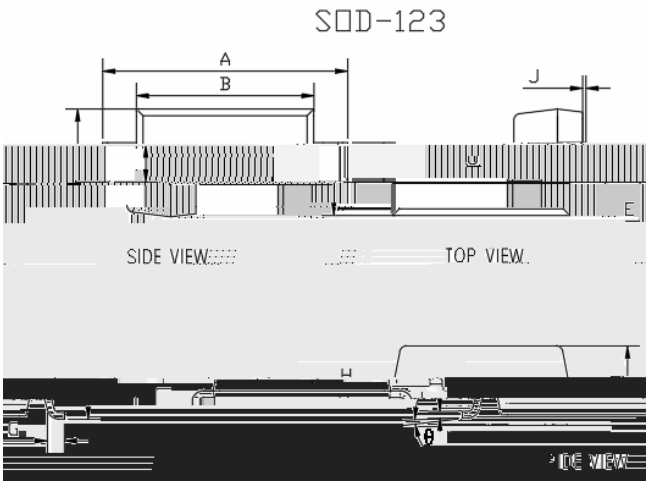
7_§





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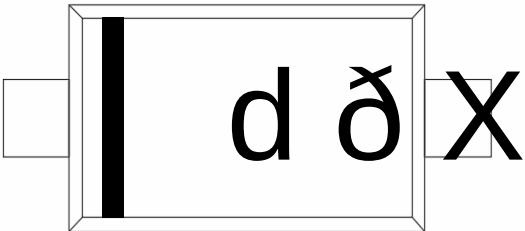
vOutline Dimensions



UNIT : mm
SUGGESTED SOLDER PAD LAYOUT

DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MM	MAX
A	0.140	0.152	3.550	3.850
B	0.100	0.112	2.550	2.850
C	0.055	0.071	1.400	1.800
D	0.037	0.053	0.950	1.350
E	0.020	0.028	0.510	0.710
F	0.150	0.450	G	0.006 0.018
G	0.080	0.250	H	0.003 0.010
H	0.000	0.150	J	0.000 0.006
θ	8°		θ	0 8°

ΩMarking Information



Note:
1 . All marking is at middle of the product body
\$00 PDUNLQJ LV LQ ODVHU PDUNLQJ
%RG\ FRORU %ODFN

