

Descriptions

The CT0540UA is schottky barrier diode in a SOD-123 Plastic Package.

Features

- Low forward voltage

Applications

- High efficiency DC/DC conversion
- Switch mode power supply
- Inverse polarity protection
- Low power consumption applications

Equivalent Circuit&Pinning



SOD-123

Marking

See Marking Instructions.

Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Value	Unit
Non-repetitive Peak Repetitive Voltage	V_{RM}	40	V
Repetitive Peak Reverse Voltage	V_{RRW}	40	V
RMS Reverse voltage	$V_{R(RMS)}$	28	V
Average Rectified Output Current	I_o	0.5	A
Non-Repetitive Peak Forward Surge Current ¹	I_{FSM}	5.5	A
Power Dissipation	P_D	410	mW
Junction Temperature	T_J	125	°C
Storage Temperature	T_{STG}	-55 to +150	°C

Note1: 8.3ms single half sine-wave.

Electrical Characteristics(Ta=25°C)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	V_{BR}	$I_R=100\mu A$	40	-	-	V
Forward Voltage	V_F	$I_F = 0.5A$	-	-	0.55	V
Reverse Current	I_R	$V_R = 40V$	-	-	200	μA
Capacitance	C_T	$V_R=4V, f=1MHz$	-	30	-	pF

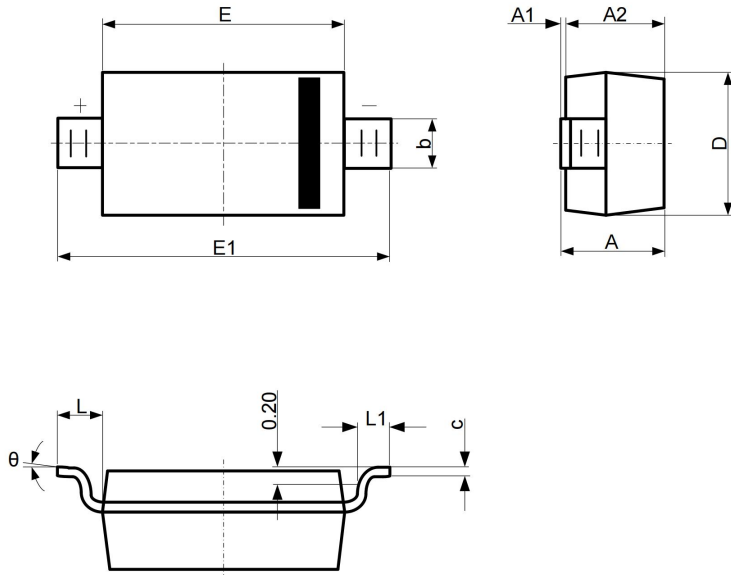
Marking instructions



Qty: 3k/Reel

Outline Drawing -SOD-123

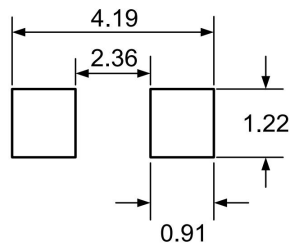
PACKAGE OUTLINE



SOD-123

DIMENSIONS

SYMBOL	MILLIMETER		INCHES	
	MIN	MAX	MIN	MAX
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
theta	0° - 8°		0° - 8°	



DIMENSIONS: MILLIMETERS

Notes

1. Controlling Dimensions in Millimeters.
2. Dimensions are exclusive of mold flash and metal burrs.