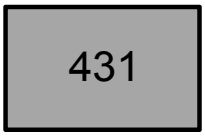
Features

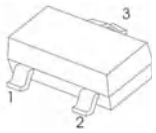
- Programmable output voltage to 36V
- Low dynamic output impedance 0.2ohm
- Sink current capability of 1.0 to 100mA
- Typical for operation over full rated operating temperature range

Marking



SOT-23

1.REFERENCE
2.CATHODE
3. ANODE



Absolute Maximum Ratings (Tamb=25℃)

Parameter	Symbol	Rating	Unit
Cathode Voltage	Vka	37	V
Cathode Current Range	Ikao	-100 +150	mA
Reference Input Current Rang	Iref	-0.05 +10	mA
Operating Junction Temperature	Tj	150	℃
Operating Ambient Temperature	Topr	0 +70	℃
Storage Temperature	Tstg	-65~150	℃

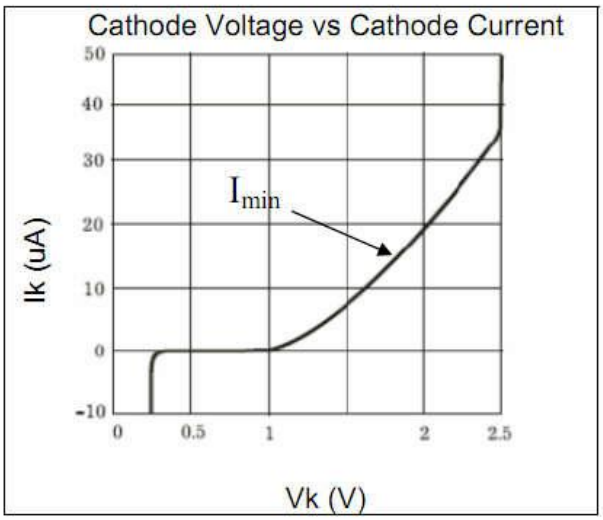
RECOMMENDED OPERATING CONDITIONS

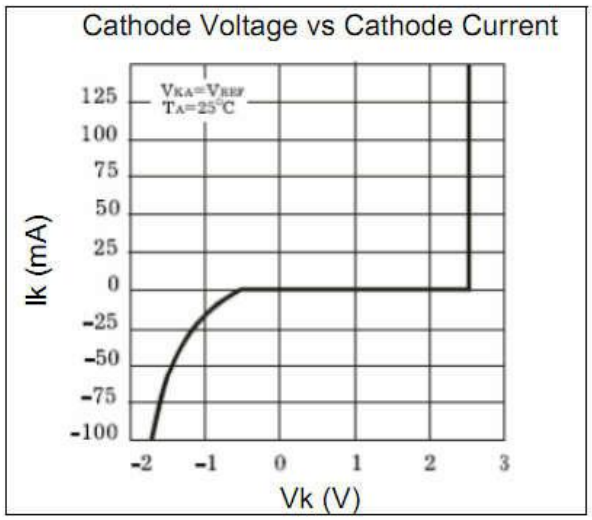
Parameter	Symbol	Min	Typ	Max	Unit
Cathode Volltage	Vka	Vref		36	V
Cathode Current	Ika	1		100	mA

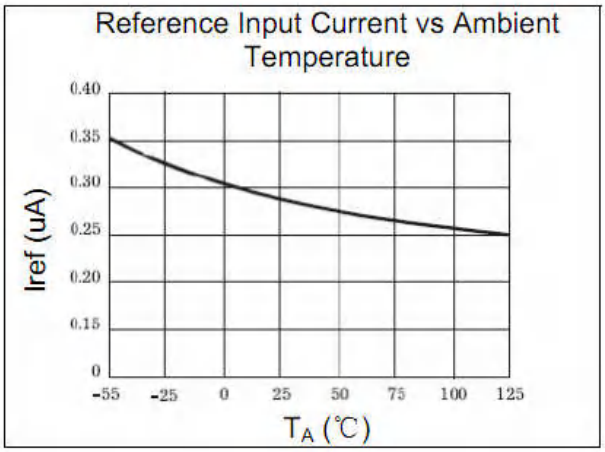
Electrical Characteristic(Tamb=25℃)

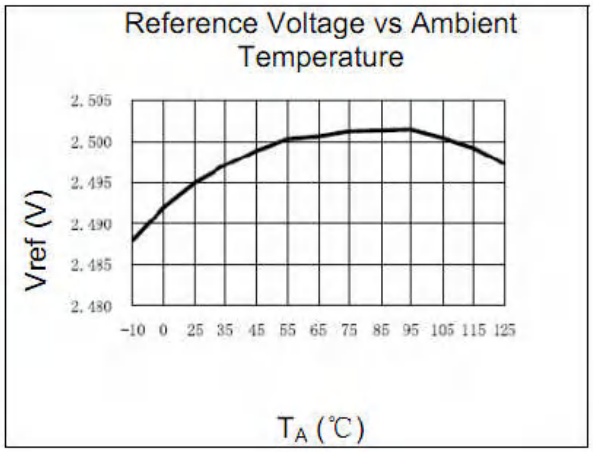
Parameter	Symbol	Test Condition	Min		Max	Unit
Reference Input Voltage	Vref	Vka=Vref,Ika=10mA	2.44	2.495	2.55	V
Deviation of reference input Voltage Over temperature	⊿Vref/⊿T	Vka=Vref,Ika=10mA; 0℃≦Ta≦70℃		4.5	17	mV
Ratio of change in reference input voltage to the change in cathode voltage	⊿Vref/⊿Vka	Ika=10mA,⊿Vka=10V～Vref		-1	-2.7	mV/V
Ratio of change in reference input voltage to the change in cathode voltage	⊿Vref/⊿Vka	Ika=10mA,⊿Vka=36V～10V		-0.5	-2	mV/V
Reference Input Current	Iref	Ika=10V,R1=10Kohm,R2=∞		1.5	4	uA
Deviation of reference input Current Over Full Temperature Range	⊿Iref/⊿T	Ika=10V,R1=10Kohm,R2=∞, Ta=full tempertaure		0.4	1.2	uA
Minimum Cathode Current for Regulation	$Ika_{(min)}$	Vka=Vref		0.45	1	mA
Off-State Cathode Current	$Ika_{(off)}$	Vka=36V,Vref=0		0.05	1.0	uA
Dynamic Impedance	Zka	Vka=Vref,Ika=1 to 100mA,f=1.0kHz		0.15	0.5	ohm

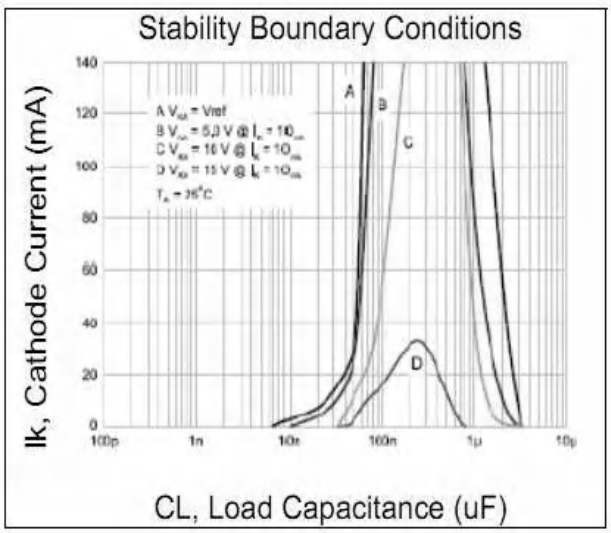
RATING AND CHARACTERISTIC CURVES

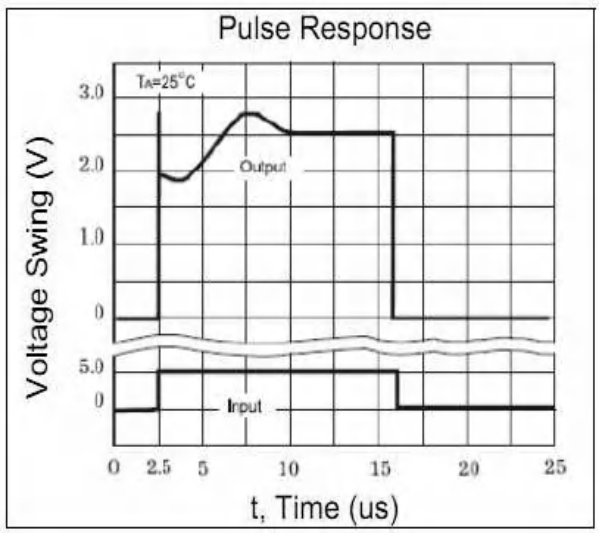








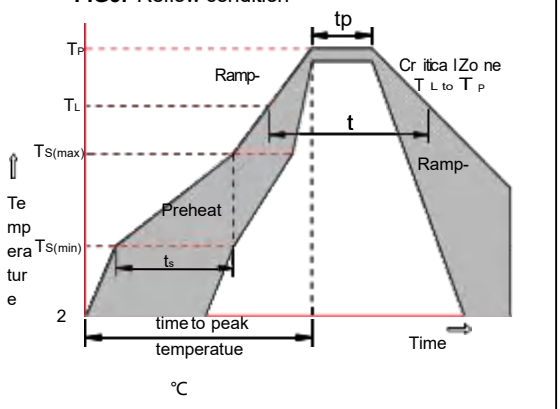




Soldering parameters

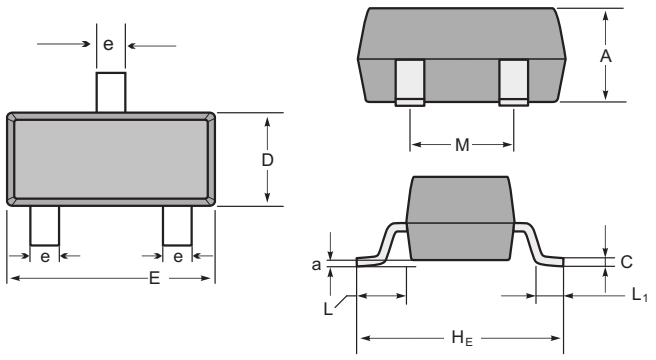
Reflow Condition		Pb-Free assembly (see as bellow)
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150℃
	-Temperature Max($T_{s(max)}$)	+200℃
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3℃/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3℃/sec. Max
Reflow	-Temperature(T_L)(Liquid us)	+217℃
	-Temperature(t_L)	60-150 secs.
Peak Temp (T_p)		+260(+0/-5)℃
Time within 5℃ of actual Peak Temp (t_p)		30 secs. Max
Ramp-down Rate		6℃/sec. Max
Time 25℃ to Peak Temp (T_P)		8 min. Max
Do not exceed		+260℃

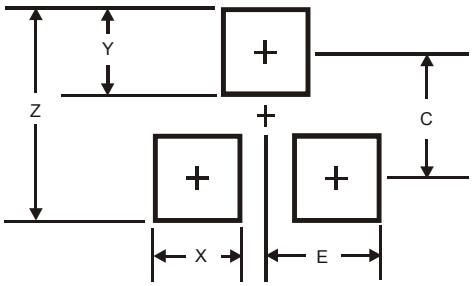
FIG5: Reflow condition



Package Dimensions & Suggested Pad Layout

SOT23





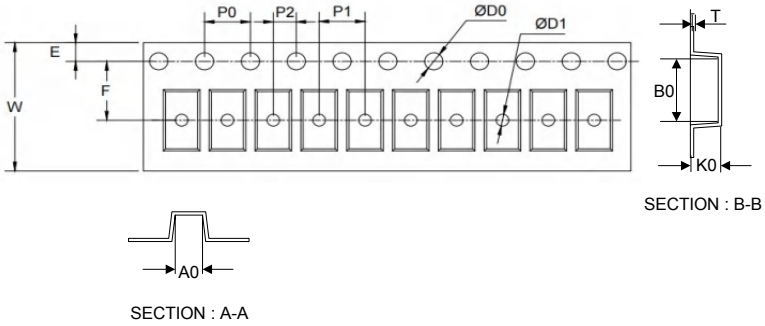
SOT-23 mechanical data

UNIT		A	C	D	E	H_E	e	M	L	L_1	a
mm	max	1.1	0.15	1.4	3.0	2.6	0.5	1.95	0.55 (ref)	0.36 (ref)	0.0
	min	0.9	0.08	1.2	2.8	2.2	0.3	1.7			0.15
mil	max	43	6	55	118	102	20	77	22 (ref)	14 (ref)	0.0
	min	35	3	47	110	87	12	67			6

Dimensions	SOT23
Z	2.9
X	0.8
Y	0.9
C	2.0
E	1.35

Tape & rell specification

Tape

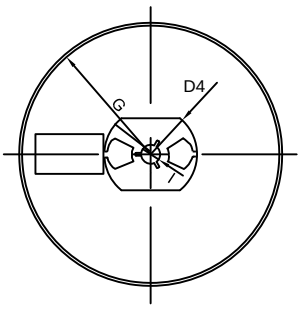


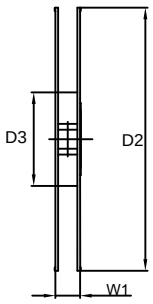
SECTION : B-B

SECTION : A-A

Symbol	Dimension (mm)
P0	4.00±0.10
P1	4.00±0.10
P2	2.00±0.10
D0	1.55±0.10
D1	1.05±0.10
E	1.55±0.10
F	3.60±0.10
W	8.00±0.10
A0	3.80±0.20
B0	3.25±0.20
K0	1.45±0.10
T	0.25±0.05

7” Reel





D2	178.0±3.0
D3	55Min.
D4	R24.0±3.0
G	R82.0±3.0
I	13.0±2.0
W1	11.0±3.0

Quantity: 3000PCS