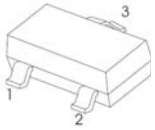
TL431

SOT-23 LINEAR INTEGRATED CIRCUIT

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

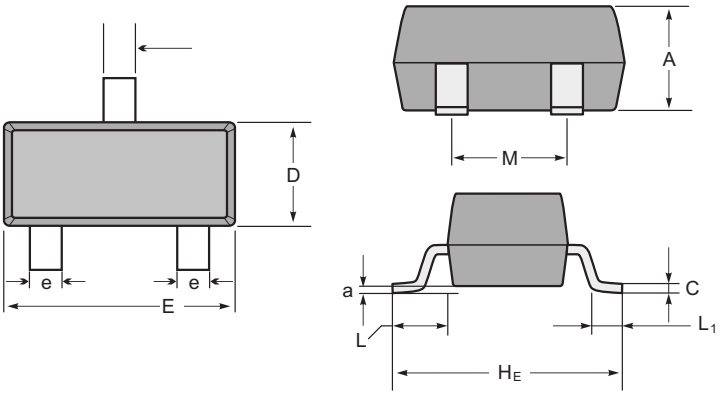
SOT-23



1.REFERENCE
2.CATHODE
3. ANODE

Marking

Type number	Marking code
TL431	431



SOT-23 mechanical data

UNIT		A	C	D	E	HE	e	M	L	L1	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

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

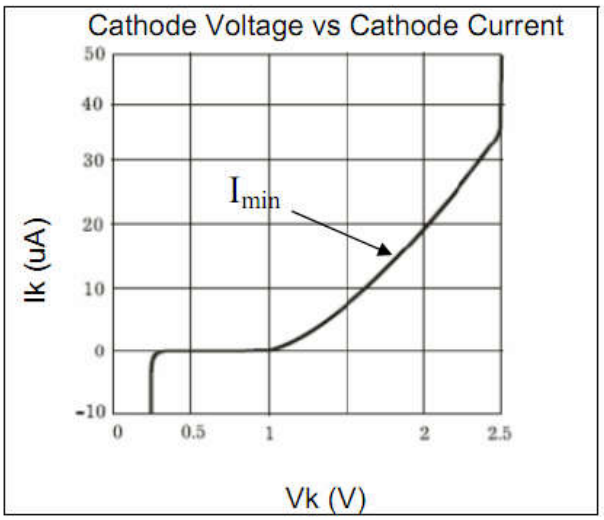
Parameter	Symbol	Min	Typ	Max	Unit
Cathode Volltage	Vka	Vref		36	V
Cathode Current	Ika	1		100	mA

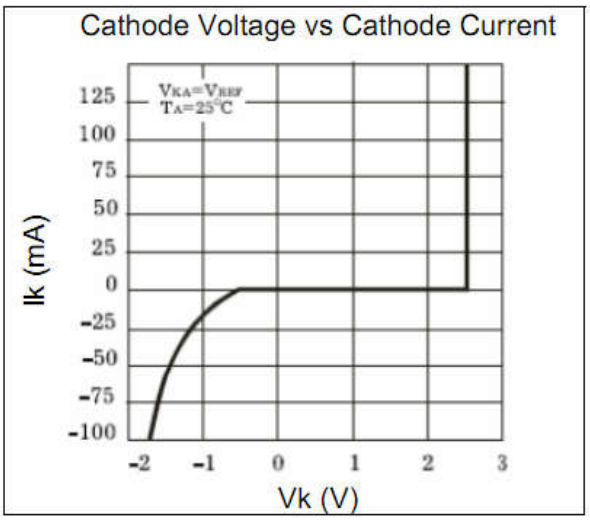
Electrical Characteristic(Tamb=25℃)

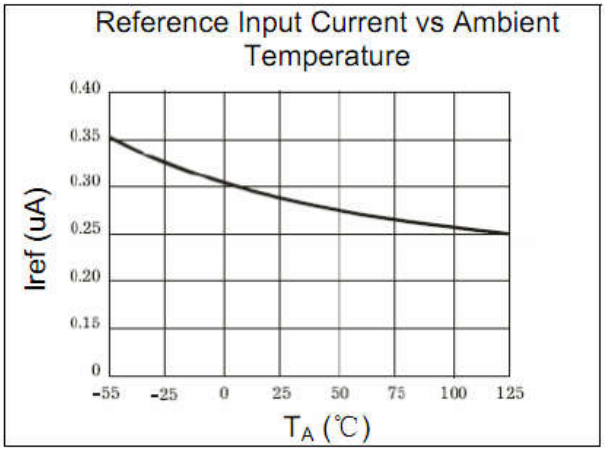
Parameter	Symbol	Test Condition	Min		Max	Unit
Reference Input Voltage	Vref	Vka=Vref,Ika=10mA	2.44	2.495	2.55	V
Deviation of reference input Voltage Over temperature	⊿Vref/ ⊿T	Vka=Vref,Ika=10mA; 0℃≦Ta≦70℃		4.5	17	mV
Ratio of change in reference input voltage to the change in cathode voltage	⊿Vref/ ⊿Vka	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

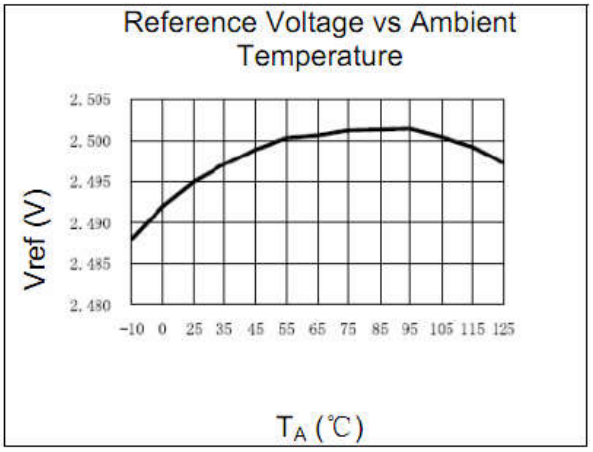
TL431 LINEAR INTEGRATED CIRCUIT

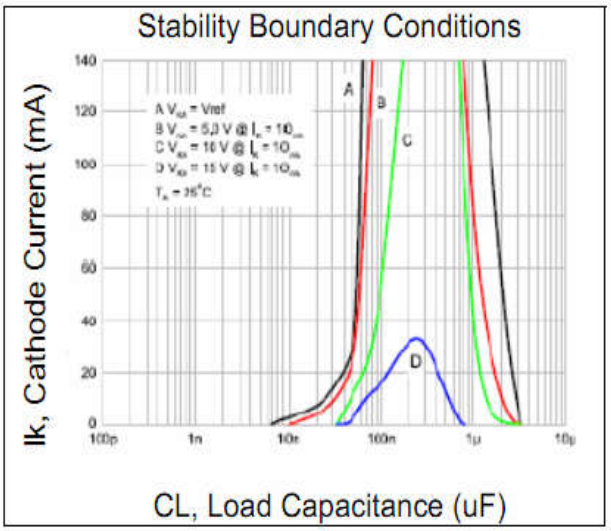
Characteristics Curve

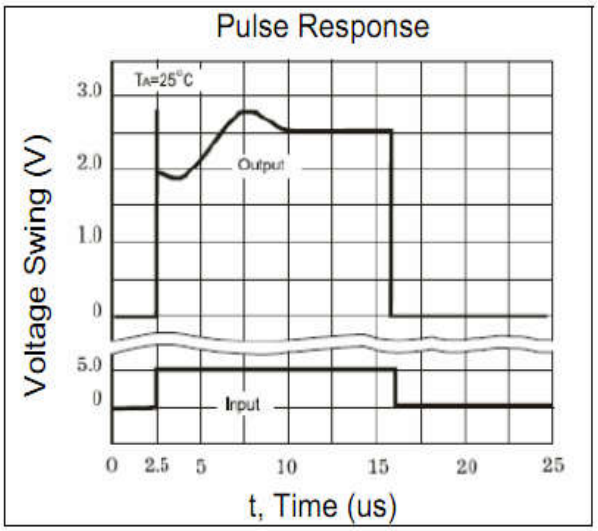












X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Voltage References ***category:***

Click to view products by GOODWORK ***manufacturer:***

Other Similar products are found below :

AS431ARTR-E1 AZ431BR-ATRE1 5962-8686103XC NCV431BVDMR2G SCV431AIDMR2G REF01J/883 SC431ILPRAG AP432AQG-7 LM4040B25QFTA TL431BL3T TL431ACZ KA431SLMF2TF KA431SMF2TF KA431SMFTF LM4040QCEM3-3.0/NOPB LM4041C12ILPR LM4050AIM3X-5.0/NOPB LM4120AIM5-2.5/NOP LM431SCCMFX ZXRE250BSA-7 ZXRE125DN8TA TS3330AQPR ZXRE250ASA-7 ZTL431ASE5TA ADR3512WCRMZ-R7 REF3012AIDBZR LM385BM-2.5/NOPB LM385D-2.5R2G LM4040AIM3-10.0 LM4040CIM3-10.0 LM4040CIM3X-2.0/NOPB LM4041DH5TA LM4041QDIM3-ADJ/NO LM4051BIM3-ADJ/NOPB LM4051CIM3X-1.2/NOPB LM4128CMF-1.8/NOPB LM4132DMF-1.8/NOPB LM4132EMF-1.8/NOPB LM4132EMF-2.0/NOPB LM431CIM LM385BD-2.5R2G LM385M-2.5/NOPB LM4030AMF-4.096/NOPB LM4040D30ILPR AP432YG-13 AP431IANTR-G1 AP431AWG-7 AS431ANTR-G1 AS431AZTR-G1 AS431BZTR-E1