

Features

- Output Voltage can be Adjusted to 36V
- Trapping Current Capability is 1 to 100 mA
- The Effective Temperature Compensation in the Working Range of Full Temperature
- Low Dynamic Output Impedance, Its Typical Value is 0.2Ω
- Low Output Noise Voltage
- Fast On-state Response
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)

Maximum Ratings

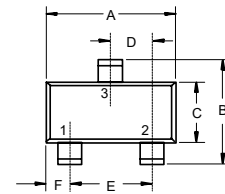
Parameter	Symbol	Value	Unit
Input Voltage	V_1	37	V
Operating Temperature	T_{opr}	0~70	°C
Storage Temperature Range	T_{STG}	-55~150	°C

Note:

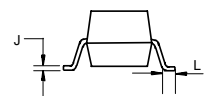
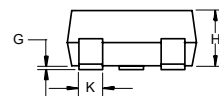
1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Adjusttable Accurate Refence Source

SOT-23



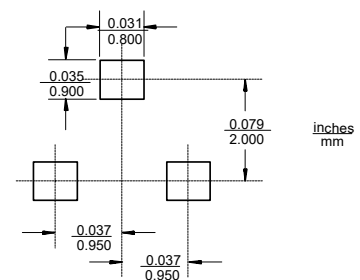
1. (R) REFERENCE
2. (K) CATHODE
3. (A) ANODE



DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.110	0.120	2.80	3.04	
B	0.083	0.104	2.10	2.64	
C	0.047	0.055	1.20	1.40	
D	0.034	0.041	0.85	1.05	
E	0.067	0.083	1.70	2.10	
F	0.018	0.024	0.45	0.60	
G	0.0004	0.006	0.01	0.15	
H	0.035	0.043	0.90	1.10	
J	0.003	0.007	0.08	0.18	
K	0.012	0.020	0.30	0.51	
L	0.007	0.020	0.20	0.50	

Suggested Solder Pad Layout



Electrical Characteristics @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reference Input Voltage	V_{ref}	$V_{KA}=V_{REF}, I_{KA}=10mA$	2.45	2.50	2.55	V
Deviation of Reference Input Voltage	$\frac{\Delta V_{ref}}{\Delta T}$	$V_{KA}=V_{REF}, I_{KA}=10mA$ $T_{min} \leq T_a \leq T_{max}$		4.5	17	mV
Ratio of Change in Reference Input Voltage to the Change in Cathode Voltage	$\frac{\Delta V_{ref}}{\Delta V_{KA}}$	$\Delta V_{KA}=10V \sim V_{ref}, I_{KA}=10mA$		-1.0	-2.7	
		$\Delta V_{KA}=36V \sim 10V, I_{KA}=10mA$		-0.5	-2.0	
Reference Input Current	I_{ref}	$I_{KA}=10mA,$ $R_1=10K\Omega, R_2=\infty$		1.5	4.0	μA
Deviation of Reference Input Current Over Full Temperature Range	$\frac{\Delta I_{ref}}{\Delta T}$	$I_{KA}=10mA,$ $R_1=10K\Omega, R_2=\infty$ $T_A=full\ Temperature$		0.4	1.2	μA
Minimum Cathode Current for Regulation	$I_{KA(min)}$	$V_{KA}=V_{REF}$		0.45	1.0	mA
Off-State Cathode Current	$I_{KA(off)}$	$V_{KA}=36V, V_{REF}=0V$		0.05	1.0	μA
Dynamic Impedance	Z_{KA}	$V_{KA}=V_{REF},$ $I_{KA}=1\ to\ 100mA, f \leq 1.0KHz$		0.15	0.5	Ω

Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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