

/ Descriptions

SOP-8 Dual Voltage Comparator in a SOP-8 Plastic Package.

/ Features

$V_{CC}=2V\sim 36V$

$V_{CC}= \pm 1V\sim \pm 18V$

$I_{CC}=0.8mA$

$I_{bias}=25nA$

TTL DTL CMOS

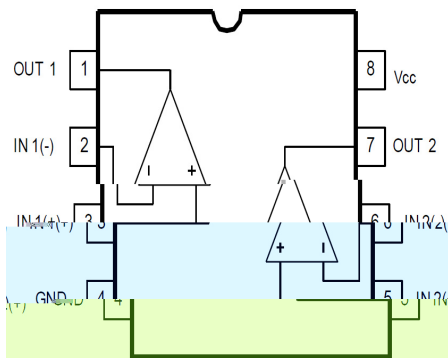
Wide operating supply range, Single or dual supply operation($V_{CC}=2V\sim 36V$ or $V_{CC}= \pm 1V\sim \pm 18V$).
Input common-mode voltage includes ground.
Low supply current drain: $I_{CC}=0.8mA$ (Typical).
Low input bias current $I_{bias}=25nA$ (Typical).
Output compatible with TTL,DTL,and CMOS logic system.
Halogen-free Product.

/ Applications

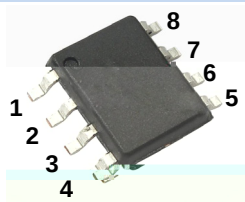
MOS

Basic comparator circuit,Low frequency operation and amplification circuit,MOS clock generator.

/ Equivalent Circuit



/ Pinning



PIN / PIN See Equivalent Circuit.

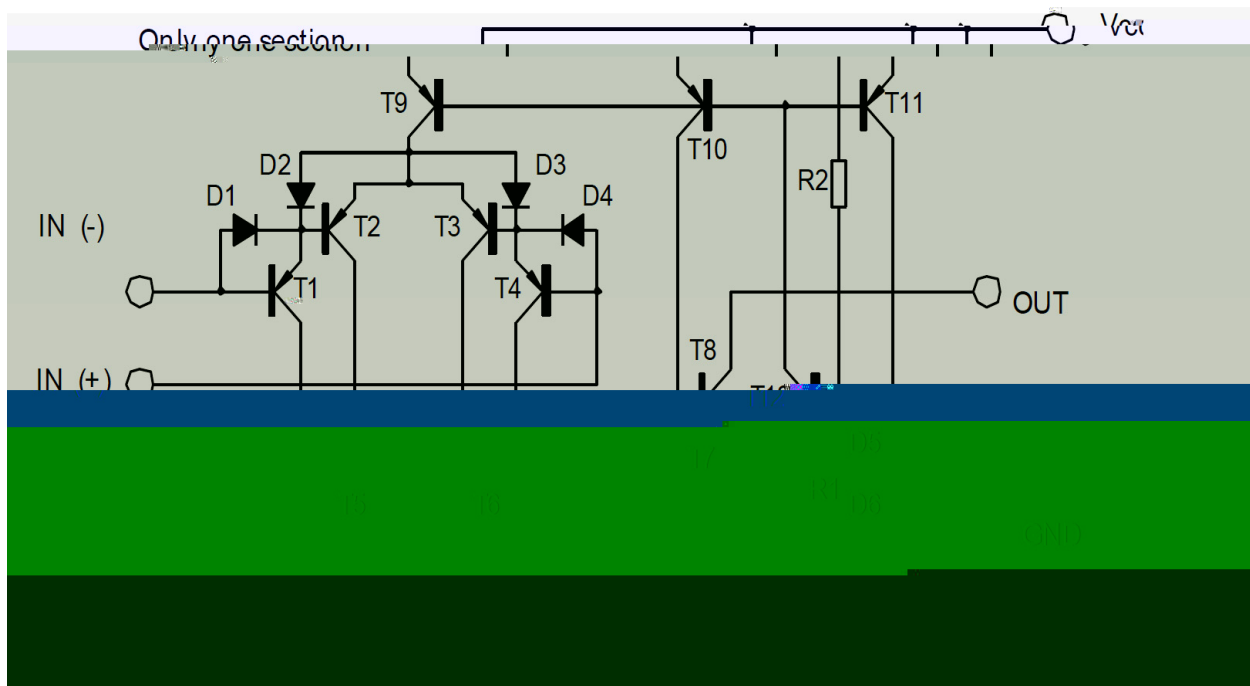
/ Marking

/ See Marking Instructions

Parameter	Symbol	Rating	Unit
Supply Voltage	V_{CC}	± 18 or 36	V
Differential input voltage	$V_{I(DIFF)}$	36	V
Input Voltage	V_I	-0.3~36	V
Power Dissipation	P_D	570	mW
Operating Temperature	T_{opr}	0 ~ +70	
Storage Temperature	T_{stg}	-65 ~ +150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Input offset voltage	V_{IO}	$V_{CM}=0$ to $V_{CC}-1.5$ $V_{o(p)}=1.4V, R_s=0$		± 1.0	± 5.0	mV
Input offset current	I_{IO}			± 5.0	± 50	nA
Input Bias current	I_b			25	250	nA
Common Mode Input Voltage Range	$V_{I(R)}$		0		$V_{CC}-1.5$	V
Supply Current	I_{CC}	$R_L = \infty$ $R_L = \infty$ V		0.6	1.0	mA

/ Functional Block Diagram



BROP393SC
Rev. D Aug.-2019

/ Electrical Characteristic Curve

Fig.7 voltage Follower pulse response
(small signal)

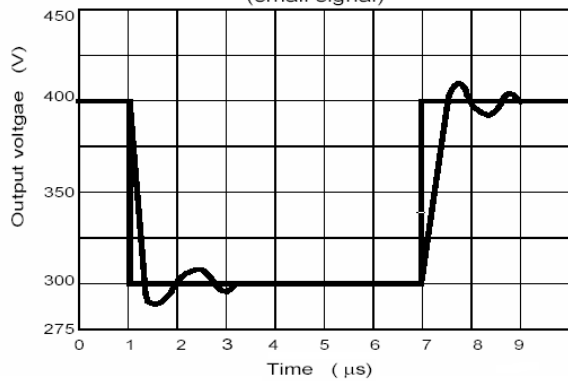


Fig.8 Large signal Frequency Response

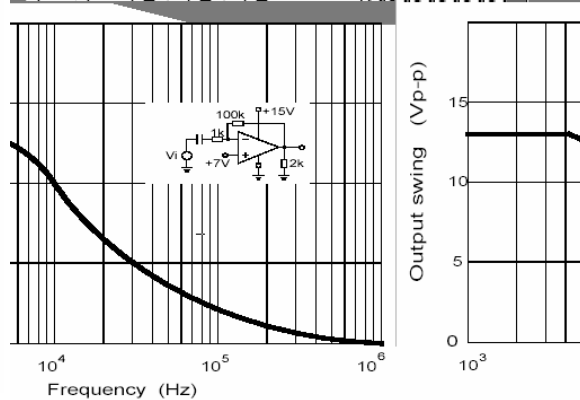


Fig.9 Output Characteristics current sourcing
 $T_a=25^{\circ}C$

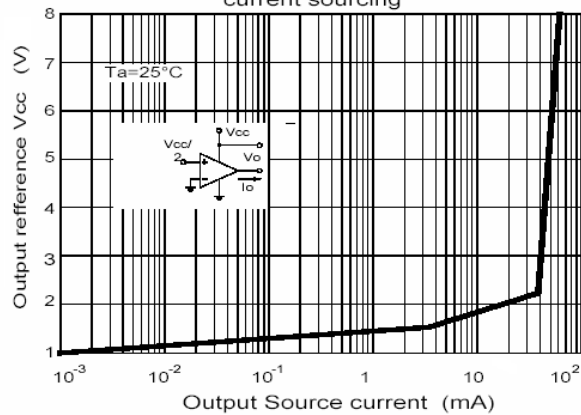


Fig.10 Output Characteristics Current sinking

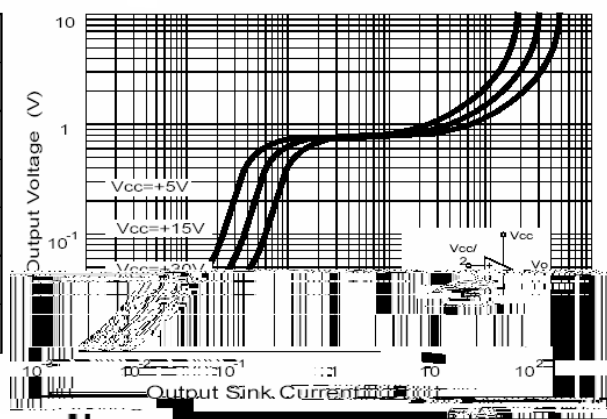
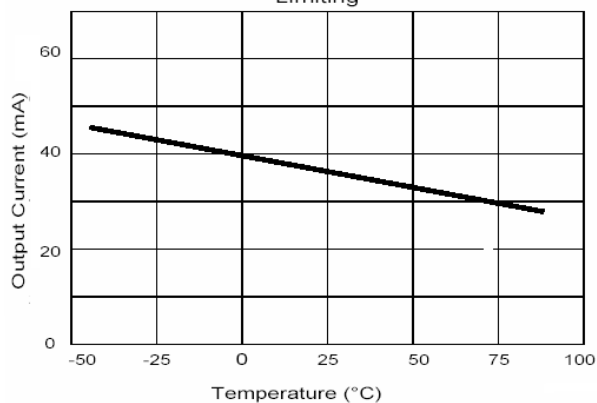
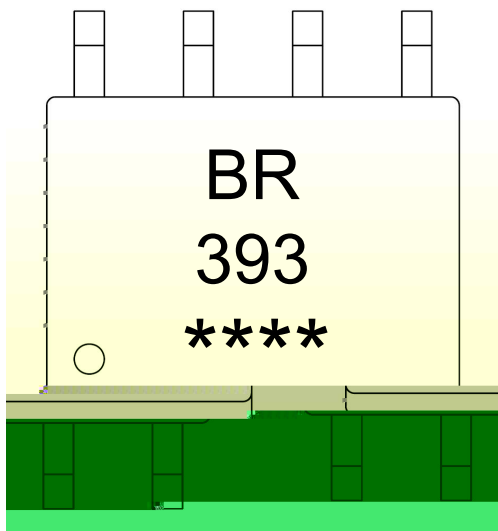


Fig.11 Current Limiting



/ Marking Instructions



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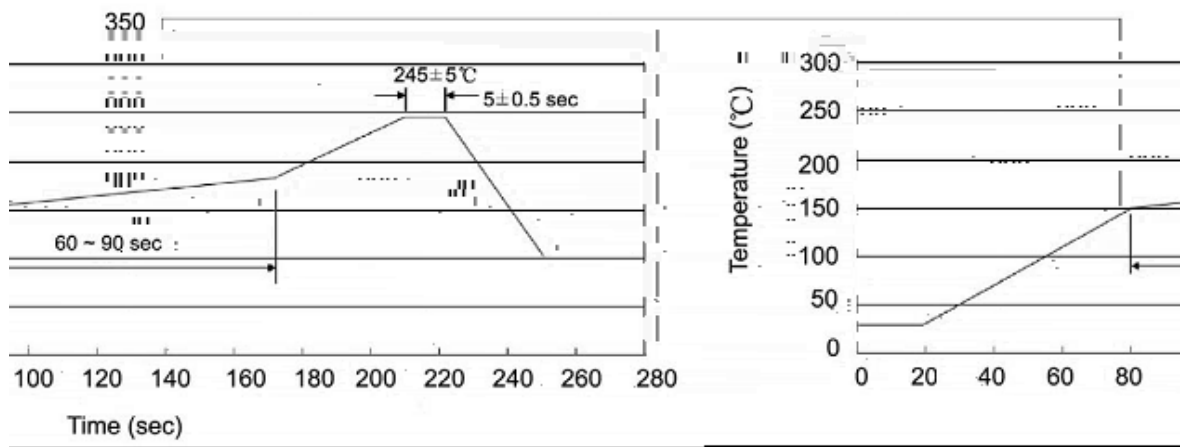
Note:

BR: Company Code.

393: Product Type.

****: Lot No. Code, code change with Lot No.

() /



Note:

- 1

150 180

60 90sec;
- 2

245±5

5±0.5sec;
- 3

2 10

/sec.
- 1.Preheating:150~180

, Time:60~90sec.
- 2.Peak Temp.:245±5

, Duration:5±0.5sec.
3. Cooling Speed: 2~10

/sec.

/ Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	只 卷盘	卷盘 盒	只 盒	盒 箱	只 箱		盒	箱

/ Notices