

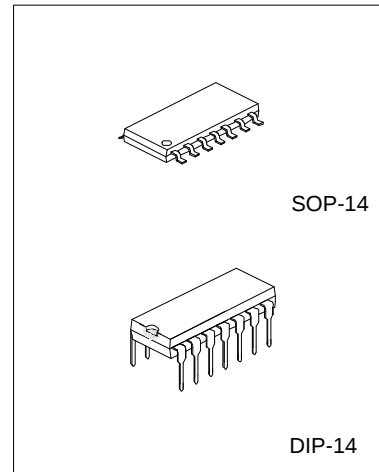
QUAD DIFFERENTIAL COMPARATOR

DESCRIPTION

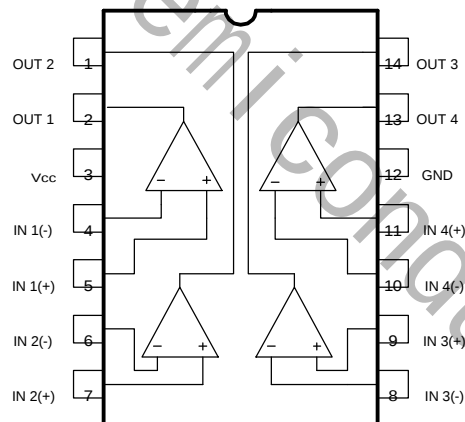
The LM339 consists of four independent voltage comparators, designed specifically to operate from a single power supply over a wide voltage range.

FEATURES

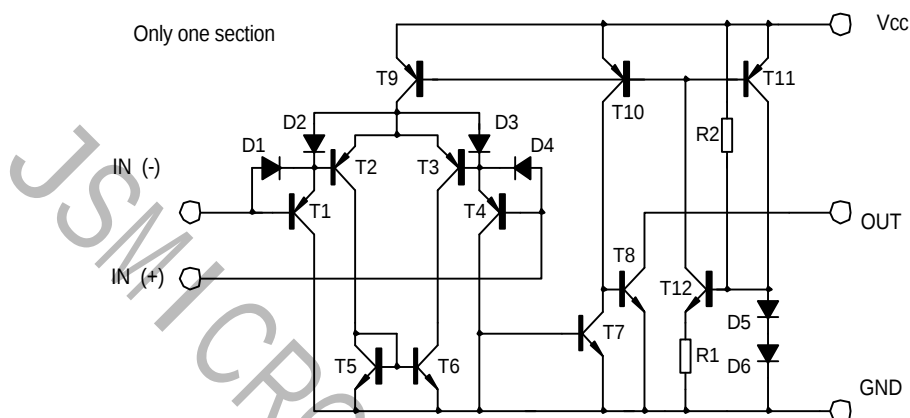
- *Signal or dual supply operation.
- *Wide operating supply range($V_{CC}=2V\sim 32V$).
- *Input common-mode voltage includes ground.
- *Low supply current drain $I_{CC}=0.8mA$ (Typical).
- *Open collector outputs for wired and connection.
- *Low input bias current $I_{bias}=25nA$ (Typical).
- *Low output saturation voltage.
- *Output compatible with TTL, DTL, and CMOS logic system.



PIN CONFIGURATIONS



BLOCK DIAGRAM



ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

PARAMETER	SYMBOL	VALUE	UNIT
Supply Voltage	Vcc	+ - 16OR 32	V
Differential input Voltage	VIDiff	32	V
Input Voltage	VI	-0.3~32V	V
Power Dissipation	Pd	570	mW
Operating Temperature	Topr	0 to +70	°C
Storage Temperature	Tstg	-65 to 150	°C

ELECTRICAL CHARACTERISTICS

(Vcc=5.0V, Ta=25°C, All voltage referenced to GND unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP.	MAX	UNIT
Input Offset Voltage	Vio	VCM=0 to Vcc-1.5 Vo(p)=1.4V, Rs=0		+1.5	+5.0	mV
Input Offset Current	Iio			+2.3	+50	nA
Input Bias Current	Ib			57	250	nA
Input Common-Mode Voltage Range	VI(R)		0		Vcc-1.5	V
Supply Current	Icc	RL=∞		1.1	2.0	mA
Large Signal Voltage Gain	Gv	Vcc=15V, RL>15kΩ	50	200		V/mV
Large Signal Response Time	tres	Vi=TTL logic wing Vref=1.4V, VRL=5V, RL=5.1kΩ		350		ns
Response Time	tres	VRL=5V, RL=5.1kΩ		1400		ns
Output Sink Current	Isink	Vi(-)>1V, Vi(+)=0V, Vo(p)<1.5V	6	18		mA
Output Saturation Voltage	Vsat	Vi(-)>1V, Vi(+)=0V, Isink=4mA		140	400	mV
Output Leakage Current	Ileakage	VI(+)=1V, VI(-)=0 Vo(p)= 5V Vo(p)=30V		0.1	1.0	nA μA
Differential Input Voltage	VI(diff)				36	V

TYPICAL PERFORMANCE CHARACTERISTICS

Fig.1 supply current

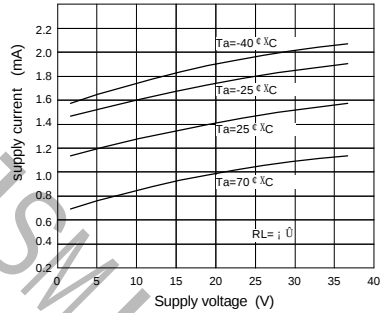


Fig.2 Input current

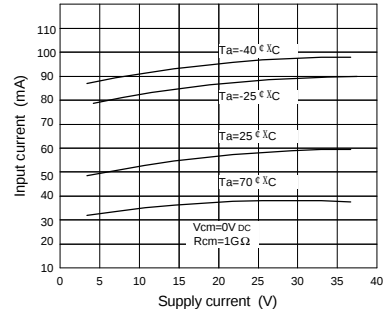


Fig.3 Output saturation voltage

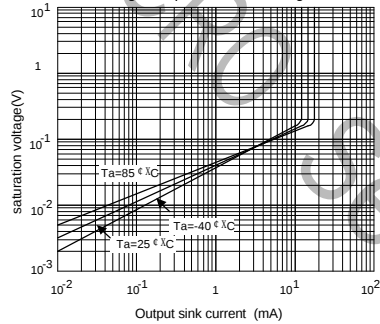


Fig.4 Reponse time for various input overdrive negative transition

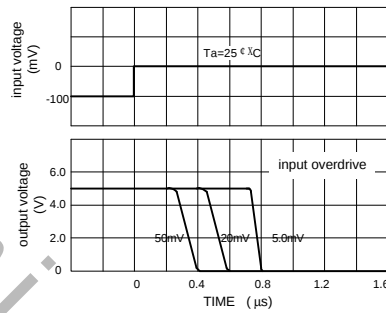
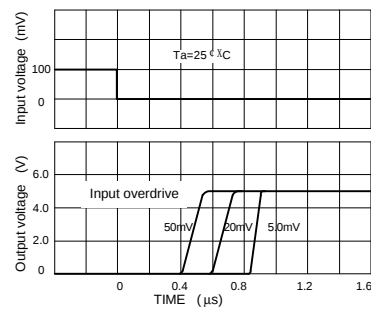
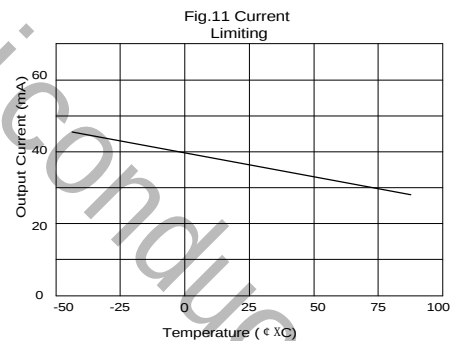
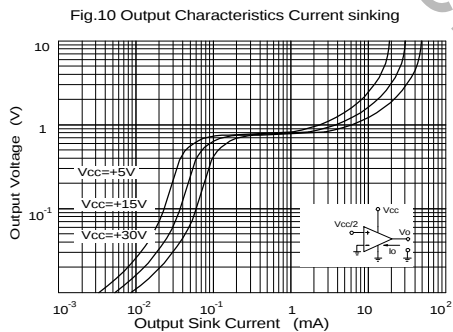
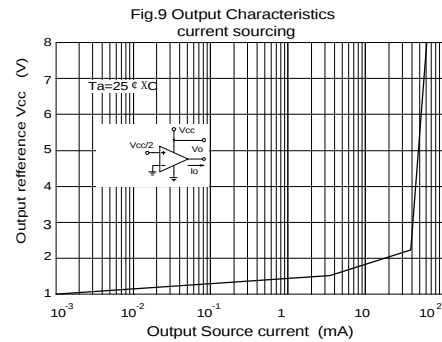
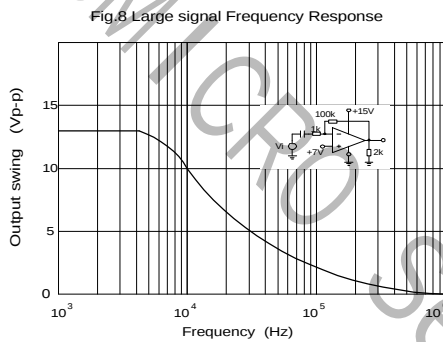
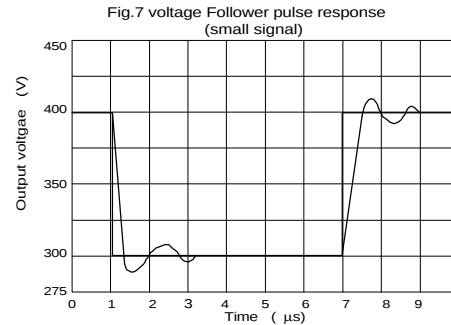
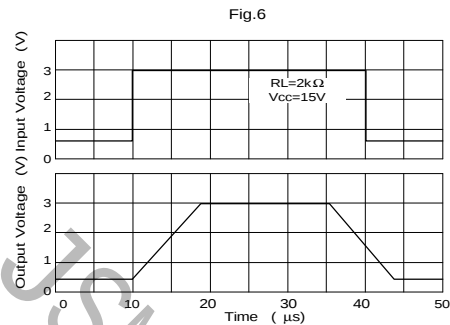


Fig.5 Reponse time for various input overdrive positive transition





单击下面可查看定价，库存，交付和生命周期等信息

[>>JSMSEMI\(杰盛微\)](#)