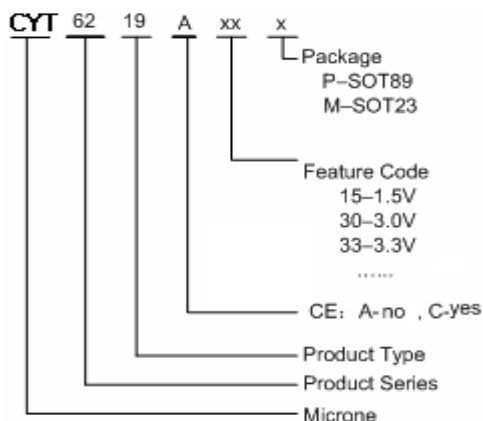


Description:

CYT6219 series are highly accurate, low noise, CMOS LDO voltage regulators. Offering low output noise, high ripple rejection ratio, low dropout, the CYT6219 series is ideal for today's cutting edge mobile phone.

The CYT6219 series is also fully compatible with low ESR ceramic capacitors, reducing cost and improving output stability. This high level of output stability is maintained even during frequent load fluctuations, due to the excellent transient response performance and high PSRR achieved across a broad range of frequencies. The CE function allows the output of regulator to be turned off, resulting in greatly reduced power consumption.

Selection Guide :



FEATURES :

- Highly Accurate: $\pm 2\%$;
- Output voltage range : 1.1V~5.0V (selectable in 0.1V steps);
- power consumption: Typ. $\approx 65\mu\text{A}$;
- Large output current : Typ. 200mA
- Input Stability: Typ. 0.5%/V ;
- Packages:
SOT23-3, SOT89-3, SOT23-5, SOT89-5.

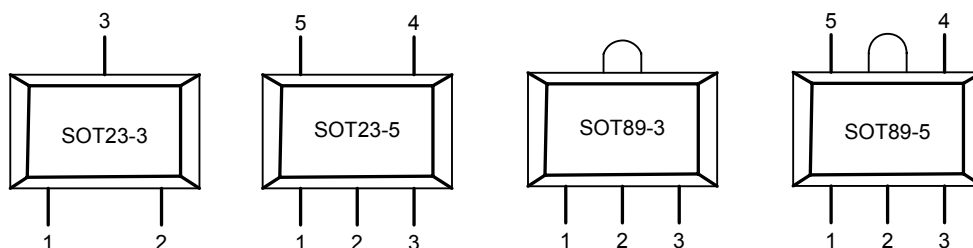
APPLICATIONS :

- Battery Powered Equipment;
- Mobile phones;
- Portable games;
- Cameras, Video systems;
- Cordless phones and radio communication equipment;
- Reference Voltage Source.

Marking Information:

DESCRIPTION	SYMBOL	PACKAGE	CE PORT	FEATURES
CYT6219Axx	M3	SOT23-3	NO	
	P	SOT89-3		
CYT6219Cxx	M5	SOT23-5	YES	ON/OFF Control
	P5	SOT89-5		

PIN CONFIGURATION :



PIN ASSIGNMENT :

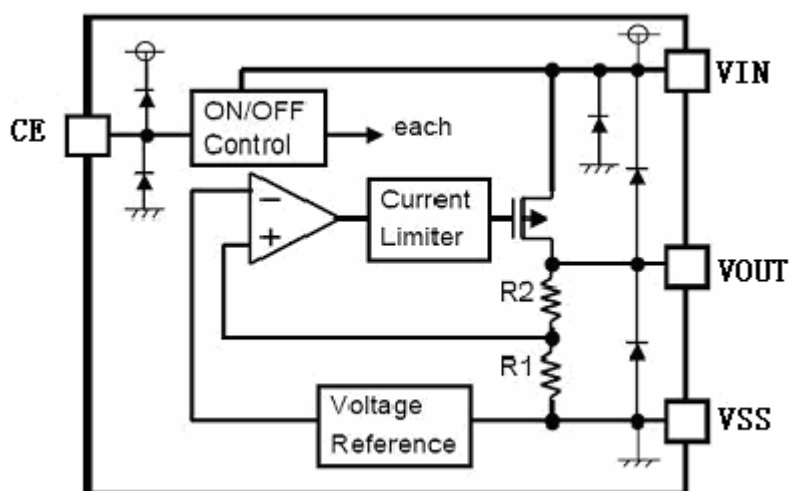
CYT6219Axx

PIN NUMBER		NAME	FUNCTION
SOT23-3	SOT89-3		
1	1	Vss	Ground
2	3	Vout	Output
3	2	Vin	Input

CYT6219Cxx

PIN NUMBER		NAME	FUNCTION
SOT23-5	SOT89-5		
1	4	Vin	Input
2	2	Vss	Ground
3	3	Vce	CE
4	1	NC	NC.
5	5	Vout	Output

Block Diagram



Asolute Maximum Ratings

PARAMETER	SYMBOL	DESCRIPTION	UNIT
Input Voltage	V_{IN}	6.5	V
Output Current	I_{out}	500	mA
Output Voltage	V_{out}	$V_{ss}-0.3 \sim V_{out}+0.3$	V
CE pin Voltage	V_{CE}	$V_{ss}-0.3 \sim V_{out}+0.3$	V
Power Dissipation	SOT23-3	P_d	300
	SOT89-3	P_d	500
Operating Ambient Temperature	T_{Opr}	-25 ~ +85	°C
Storage Temperature	T_{stg}	-40 ~ +125	°C
Soldering Temperature And Time	T_{solder}	260°C, 10s	

Electrical Characteristics

CYT6219A/C

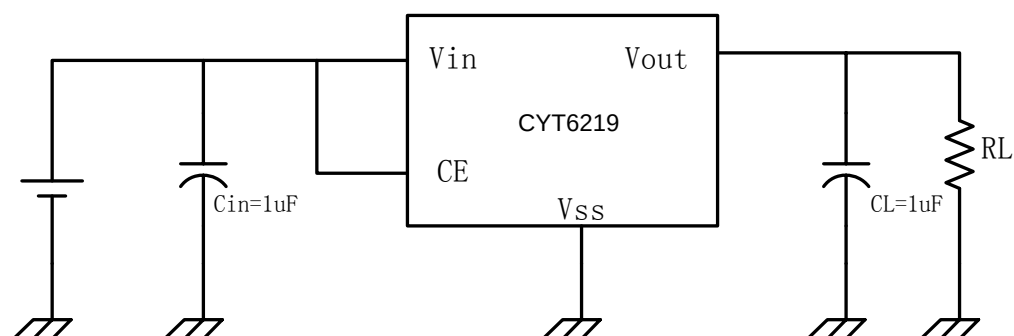
($V_{IN}=V_{OUT}+1V$, $V_{CE}=V_{IN}$, $C_{IN}=C_{OUT}=1\mu$, $T_a=25^{\circ}C$ Unless otherwise stated)

PARAMETER	SYMBOL	CONDITION	MIX	TYP	MAX	UNIT
Output Voltage	$V_{OUT}(E)$ (Note 2)	$I_{OUT}=40mA$, $V_{IN}=V_{OUT}+1V$	X 0.98	$V_{OUT}(T)$ (Note 1)	X 1.02	V
Maximum Output Current	$I_{OUT} (max)$	$V_{IN}=V_{OUT}+1V$	200			mA
Load Regulation	ΔV_{OUT}	$V_{IN}=V_{OUT}+1V$, $1mA \leq I_{OUT} \leq 100mA$		30		mV
Dropout Voltage (Note 3)	V_{dif1}	$I_{OUT} = 100mA$		200		mV
	V_{dif2}	$I_{OUT} = 200mA$		400		mV
Supply Current	I_{SS}	$V_{IN}=V_{OUT}+1V$		65		μA
Breakoff Current	I_{CEL}	$V_{CE}=0V$		0.1	1	μA
Line Regulations	$\frac{\Delta V_{OUT}}{\Delta V_{IN} \cdot V_{OUT}}$	$I_{OUT} = 40mA$ $V_{OUT}+1V \leq V_{IN} \leq 6.5V$		0.05		%/V
CE "High" Voltage	V_{CEH}	Start up	0.6			V
CE "Low" Voltage	V_{CEL}	Shut down			0.5	V
Power Supply Ripple Rejection Ratio	PSRR	$V_{IN} = [V_{OUT}+1]V$ $+1V_{p-p}AC$ $I_{OUT} = 50mA, f=1kHz$		70		dB
Output noises	en	$I_{OUT} = 40mA$, 300Hz~50kHz		50		μV_{rms}

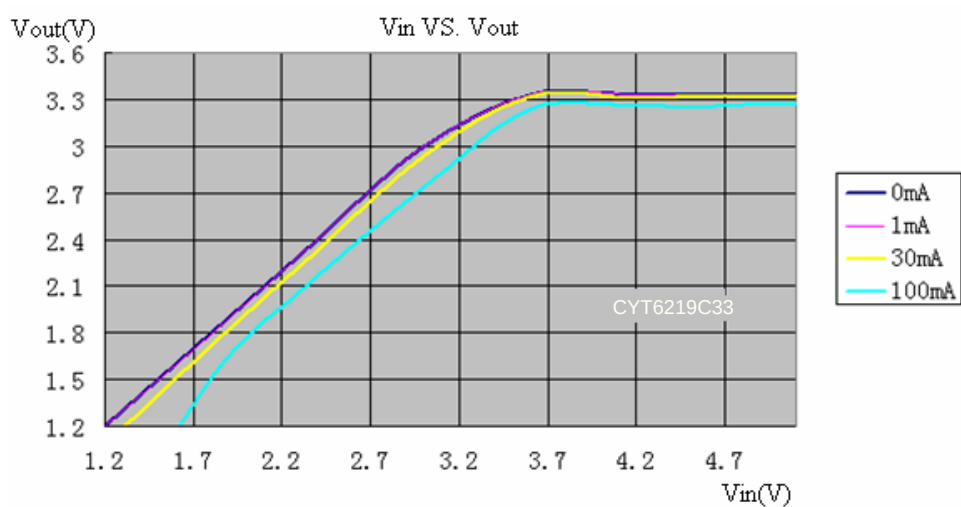
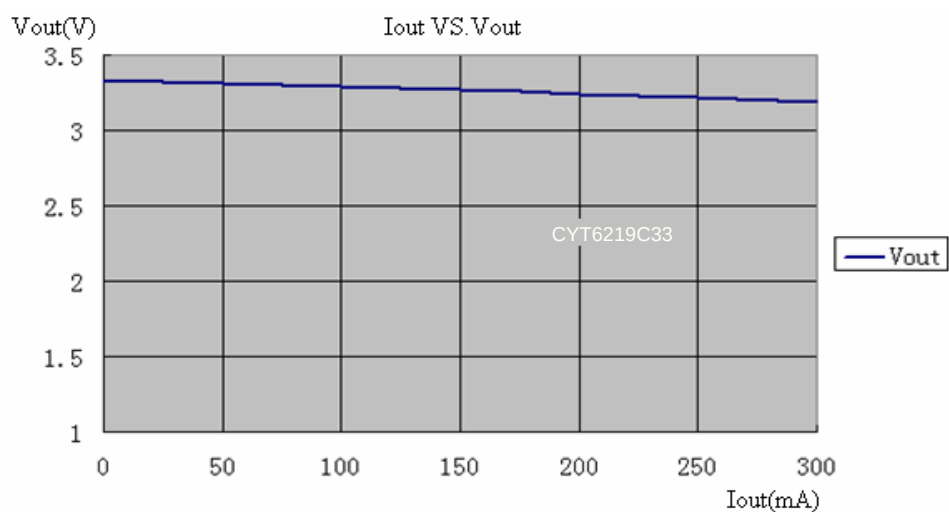
Note :

1. $V_{OUT} (T)$: Specified Output Voltage
2. $V_{OUT} (E)$: Effective Output Voltage (i.e. The output voltage when " V_{OUT} at the V_{IN} pin while maintaining a certain I_{out} value.)
3. V_{dif} : $V_{IN1} - V_{OUT} (E)'$
 V_{IN1} : The input voltage when $V_{OUT}(E)'$ appears as input voltage is gradually decreased.
 $V_{OUT} (E)'$ =A voltage equal to 98% of the output voltage whenever an amply stabilized I_{out} { $V_{OUT} (T)+1.0V$ } is input.

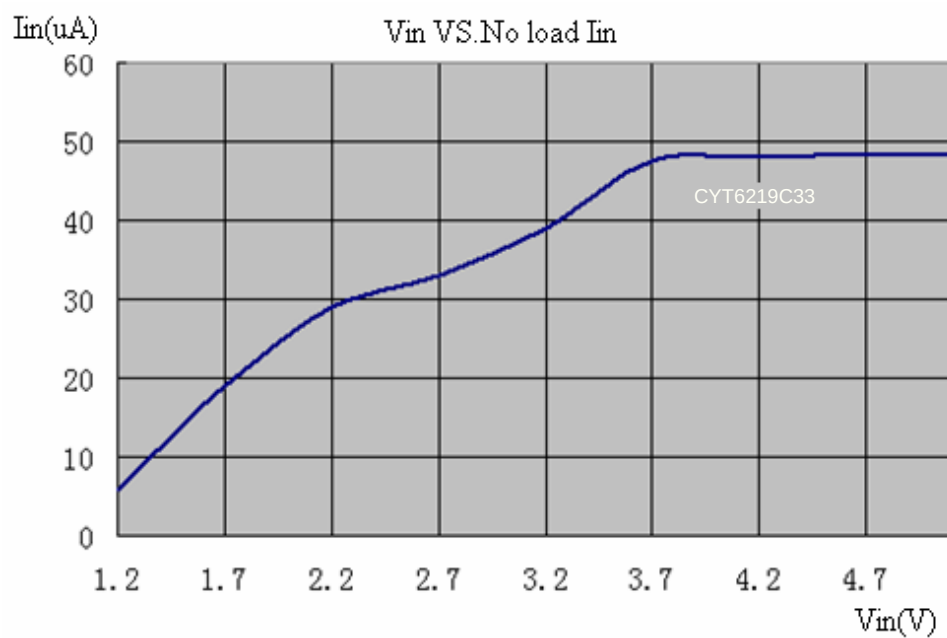
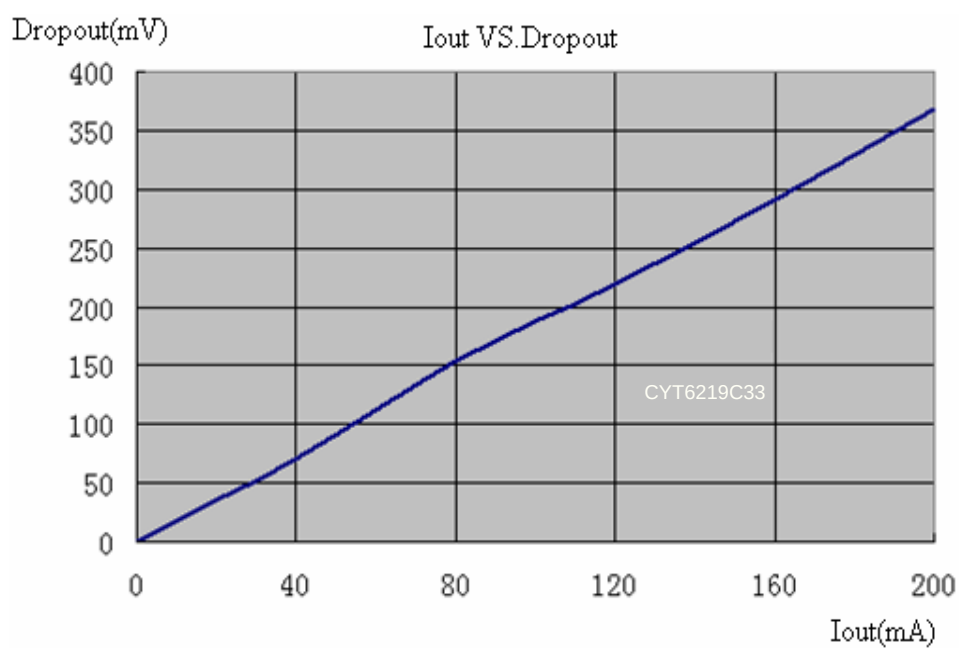
Test Circuits



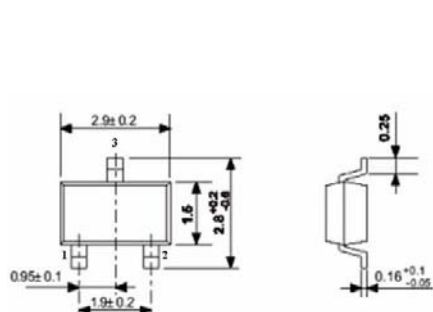
Type Characteristics



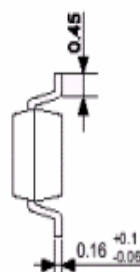
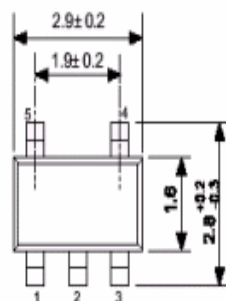
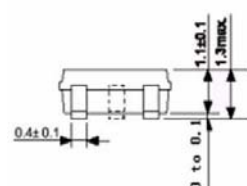
CYT6219C33



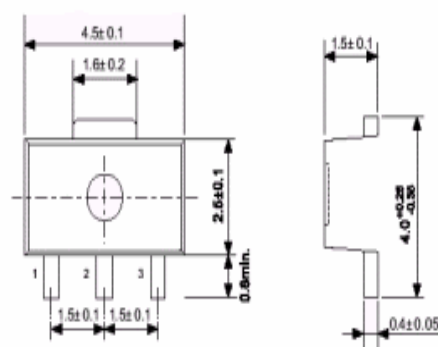
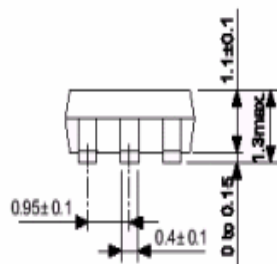
Package Dimensions



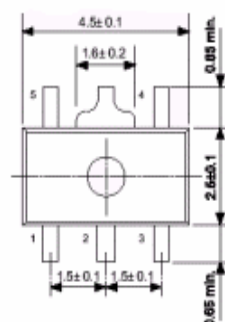
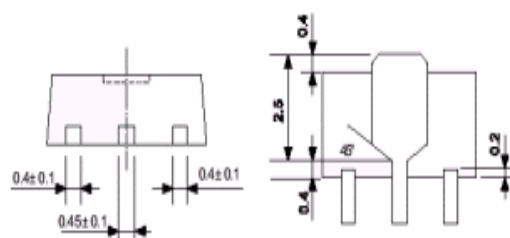
SOT23-3



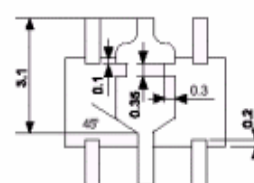
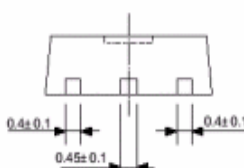
SOT23-5



SOT89-3



SOT89-5





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