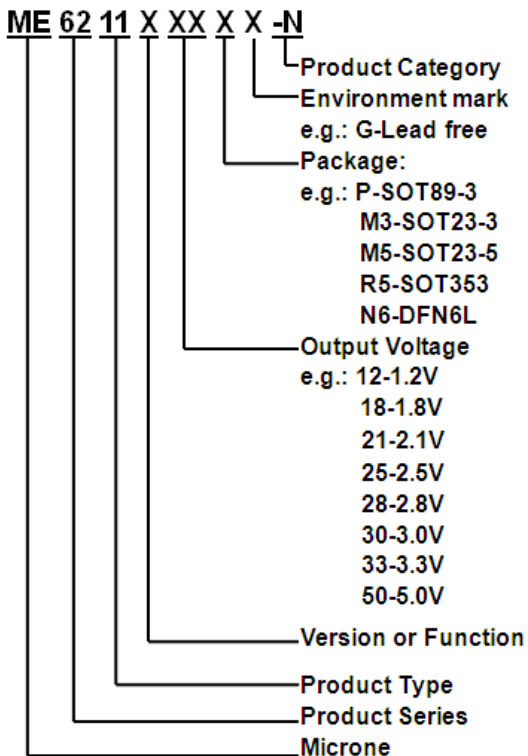


## High Speed LDO Regulators, High PSRR, Low noise, ME6211 Series

### General Description

The ME6211 series are highly accurate, low noise, CMOS LDO Voltage Regulators. Offering low output noise, high ripple rejection ratio, low dropout and very fast turn-on times, the ME6211 series is ideal for today's cutting edge mobile phone. Internally the ME6211 includes a reference voltage source, error amplifiers, driver transistors, current limiters and phase compensators. The ME6211's current limiters' foldback circuit also operates as a short protect for the output current limiter and the output pin. The ME6211 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



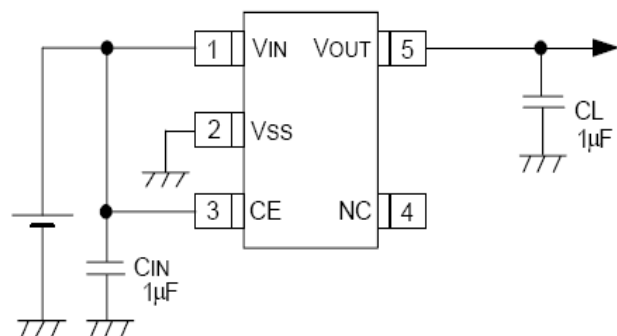
### Features

- Maximum Output Current: 500mA  
( $V_{IN}=4.3V, V_{OUT}=3.3V$ )
- Dropout Voltage: 100mV@  $I_{OUT}=100mA$
- Operating Voltage Range: 2V~6.0V
- Highly Accuracy:  $\pm 2\%$
- Low Power Consumption: 40uA (TYP.)
- Standby Current: 0.1uA (TPY.)
- High Ripple Rejection: 70dB@1KHz  
(ME6211C33)
- Low output noise: 50uVrms
- Line Regulation: 0.05% (TYP.)
- Ultra Small Packages: SOT-89-3, SOT-23-3, SOT-23-5, DFN6L, SOT-353

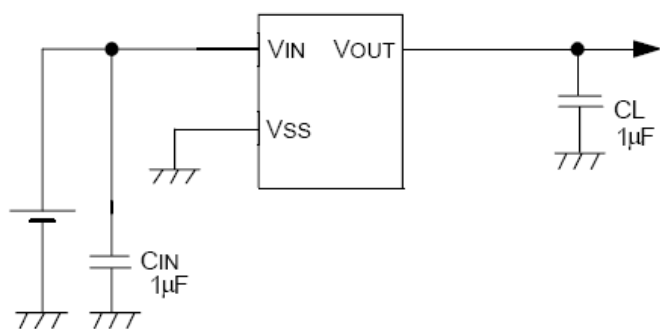
### Typical Application

- Mobile phones
- Cordless phones, radio communication equipment
- Portable games
- Cameras, Video cameras
- Reference voltage sources
- Battery powered equipment

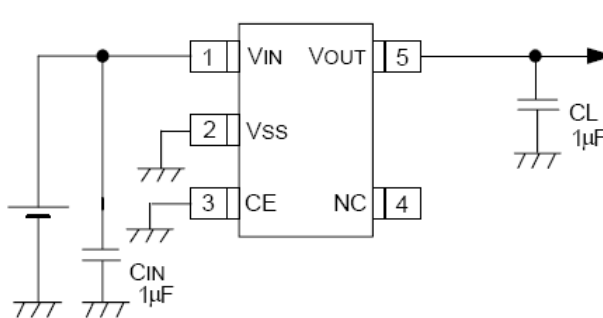
### Typical Application Circuit



**ME6211CXX**

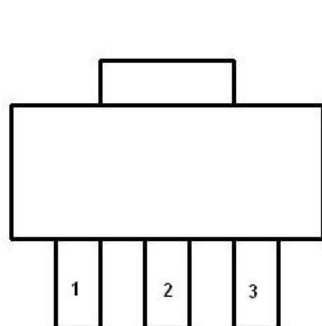


**ME6211AXX**

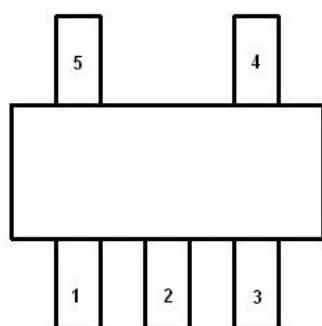


**ME6211HXX**

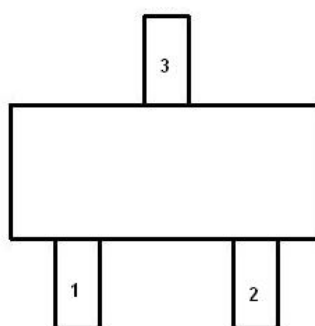
## Pin Configuration



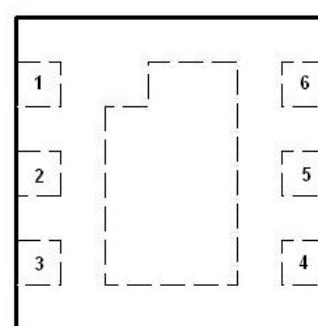
**SOT-89-3**



**SOT-23-5/SOT-353**



**SOT-23-3**





**DFN6L**

## Pin Assignment

### ME6211AXX

Pin Number			Pin Name	Functions
M3	P	P1		
SOT-23-3	SOT-89-3	SOT-89-3		
1	1	2	V <sub>SS</sub>	Ground
2	3	1	V <sub>OUT</sub>	Output
3	2	3	V <sub>IN</sub>	Power Input

The difference of printing on the chip between P and P1 is : P:  6211A , P1:  6211A1

### ME6211AXX-DS

Pin Number	Pin Name	Functions
SOT-23-3		
1	V <sub>IN</sub>	Power Input
2	V <sub>OUT</sub>	Output
3	V <sub>SS</sub>	Ground

## ME6211CXX

Pin Number		Pin Name	Functions
SOT-23-5/SOT-353	DFN6L		
1	3	V <sub>IN</sub>	Power Input
2	2	V <sub>SS</sub>	Ground
3	1	CE	ON / OFF Control
4	5,6	NC	No Connect
5	4	V <sub>OUT</sub>	Output

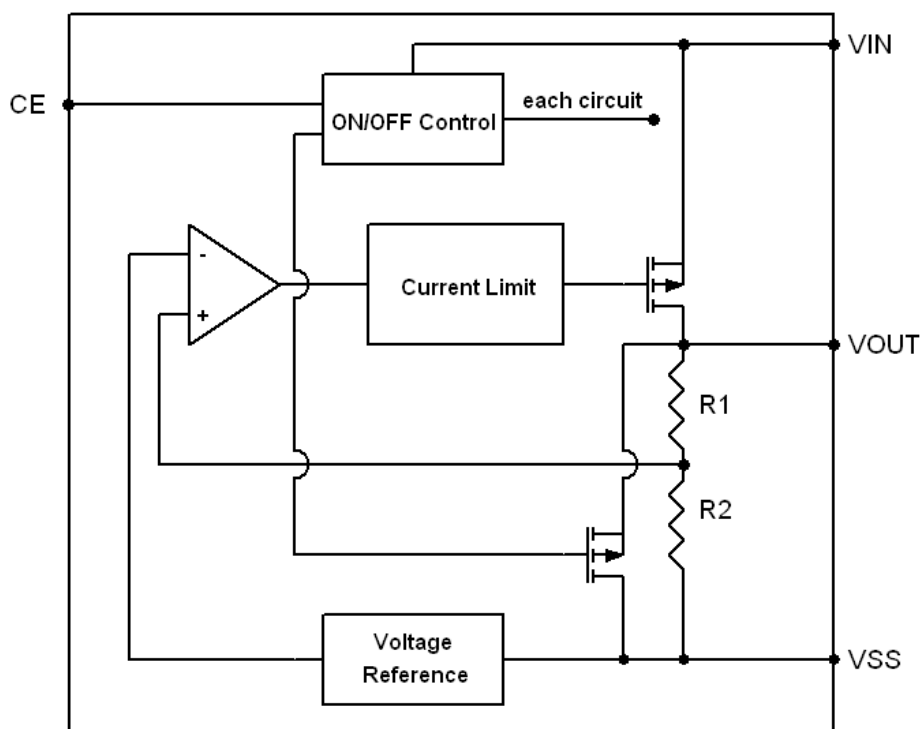
## ME6211HXX

Pin Number		Pin Name	Functions
SOT-23-5/SOT-353	DFN6L		
1	3	V <sub>IN</sub>	Power Input
2	2	V <sub>SS</sub>	Ground
3	1	CE	ON / OFF Control
4	5,6	NC	No Connect
5	4	V <sub>OUT</sub>	Output

## Absolute Maximum Ratings

Parameter		Symbol	Ratings	Units
Input Voltage		V <sub>IN</sub>	6.5	V
Output Current		I <sub>OUT</sub>	600	mA
Output Voltage		V <sub>OUT</sub>	V <sub>SS</sub> -0.3~V <sub>IN</sub> +0.3	V
CE Pin Voltage		V <sub>CE</sub>	V <sub>SS</sub> -0.3~V <sub>IN</sub> +0.3	V
Power Dissipation	SOT-23	P <sub>D</sub>	300	mW
	SOT-353		250	
	DFN		300	
	SOT-89		500	
Operating Temperature Range		T <sub>OPR</sub>	-40~+85	℃
Storage Temperature Range		T <sub>STG</sub>	-40~+125	℃

## Block Diagram



## Electrical Characteristics

### ME6211C12

( $V_{IN} = V_{OUT} + 1V$ ,  $V_{CE} = V_{IN}$ ,  $C_{IN} = C_L = 1\mu F$ ,  $T_a = 25^\circ C$ , unless otherwise noted)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Output Voltage	$V_{OUT(E)}$ (Note 2)	$I_{OUT} = 30mA$ , $V_{IN} = V_{OUT} + 1V$	X 0.98	$V_{OUT(T)}$ (Note 1)	X 1.02	V
Maximum Output Current	$I_{OUTMAX}$	$V_{IN} = V_{OUT} + 1V$		300		mA
Load Regulation	$\Delta V_{OUT}$	$V_{IN} = V_{OUT} + 1V$ , $1mA \leq I_{OUT} \leq 100mA$		8		mV
Dropout Voltage (Note 1)	$V_{DIF1}$	$I_{OUT} = 100mA$		280		mV
	$V_{DIF2}$	$I_{OUT} = 200mA$		500		mV
Supply Current	$I_{SS}$	$V_{IN} = V_{OUT} + 1V$		40		$\mu A$
Stand-by Current	$I_{CEL}$	$V_{CE} = 0V$		0.1		$\mu A$
Line Regulation	$\frac{\Delta V_{OUT}}{\Delta V_{IN} \cdot V_{OUT}}$	$I_{OUT} = 40mA$ $V_{OUT} + 1V \leq V_{IN} \leq 6.5V$		0.03		%/V
CE "High" Voltage	$V_{CEH}$	Start up	1.0			V
CE "Low" Voltage	$V_{CEL}$	Shut down			0.5	V
Output noise	EN	$I_{OUT} = 40mA$ , 300Hz~50kHz		50		$\mu V_{rms}$
Ripple Rejection	PSRR	$V_{IN} = [V_{OUT}]$ $I_{OUT} = 10mA, 1kHz$		70		dB

Rate		+1]V +1Vp-pAC	$I_{OUT}=100mA, 10kHz$		62		
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## ME6211C18

( $V_{IN}=V_{OUT}+1V$ ,  $V_{CE}=V_{IN}$ ,  $C_{IN}=C_L=1\mu F$ ,  $T_a=25^{\circ}C$ , unless otherwise noted)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Output Voltage	$V_{OUT(E)}$ (Note 2)	$I_{OUT}=30mA$ , $V_{IN}=V_{OUT}+1V$	X 0.98	$V_{OUT(T)}$ (Note 1)	X 1.02	V
Maximum Output Current	$I_{OUTMAX}$	$V_{IN}=V_{OUT}+1V$		300		mA
Load Regulation	$\Delta V_{OUT}$	$V_{IN}=V_{OUT}+1V$ , $1mA \leq I_{OUT} \leq 100mA$		9		mV
Dropout Voltage (Note 1)	$V_{DIF1}$	$I_{OUT}=100mA$		200		mV
	$V_{DIF2}$	$I_{OUT}=200mA$		400		mV
Supply Current	$I_{SS}$	$V_{IN}=V_{OUT}+1V$		40		$\mu A$
Stand-by Current	$I_{CEL}$	$V_{CE}=0V$		0.1		$\mu A$
Line Regulation	$\frac{\Delta V_{OUT}}{\Delta V_{IN} \cdot V_{OUT}}$	$I_{OUT}=40mA$ $V_{OUT}+1V \leq V_{IN} \leq 6.5V$		0.05		%/V
CE "High" Voltage	$V_{CEH}$	Start up	1.0			V
CE "Low" Voltage	$V_{CEL}$	Shut down			0.5	V
Output noise	EN	$I_{OUT}=40mA$ , 300Hz~50kHz		50		$\mu V_{rms}$
Ripple Rejection Rate	PSRR	$V_{IN} = [V_{OUT} + 1]V + 1V$ p-pAC $I_{OUT}=10mA, 1kHz$		70		dB
		$I_{OUT}=100mA, 10kHz$		62		

## ME6211C25

( $V_{IN}=V_{OUT}+1V$ ,  $V_{CE}=V_{IN}$ ,  $C_{IN}=C_L=1\mu F$ ,  $T_a=25^{\circ}C$ , unless otherwise noted)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Output Voltage	$V_{OUT(E)}$ (Note 2)	$I_{OUT}=30mA$ , $V_{IN}=V_{OUT}+1V$	X 0.98	$V_{OUT(T)}$ (Note 1)	X 1.02	V
Maximum Output Current	$I_{OUTMAX}$	$V_{IN}=V_{OUT}+1V$		400		mA
Load Regulation	$\Delta V_{OUT}$	$V_{IN}=V_{OUT}+1V$ , $1mA \leq I_{OUT} \leq 100mA$		9		mV
Dropout Voltage (Note 1)	$V_{DIF1}$	$I_{OUT}=100mA$		110		mV
	$V_{DIF2}$	$I_{OUT}=200mA$		220		mV
Supply Current	$I_{SS}$	$V_{IN}=V_{OUT}+1V$		40		$\mu A$
Stand-by Current	$I_{CEL}$	$V_{CE}=0V$		0		$\mu A$
Line Regulation	$\frac{\Delta V_{OUT}}{\Delta V_{IN} \cdot V_{OUT}}$	$I_{OUT}=40mA$ $V_{OUT}+1V \leq V_{IN} \leq 6.5V$		0.04		%/V
CE "High" Voltage	$V_{CEH}$	Start up	1.0			V
CE "Low" Voltage	$V_{CEL}$	Shut down			0.5	V
Output noise	EN	$I_{OUT}=40mA$ , 300Hz~50kHz		50		$\mu V_{rms}$

Ripple Rejection Rate	PSRR	$V_{IN}=[V_{OUT}+1]V+1$ $V_{p-pAC}$	$I_{OUT}=10mA, 1kHz$		70		dB
			$I_{OUT}=100mA, 10kHz$		62		
			$I_{OUT}=200mA, 10kHz$		62		
Short-circuit Current	$I_{SHORT}$	$V_{IN}=V_{OUT}+1V, V_{CE}=V_{IN}, V_{OUT}=0V$			120		mA

## ME6211C28

( $V_{IN}=V_{OUT}+1V$ ,  $V_{CE}=V_{IN}$ ,  $C_{IN}=C_L=1\mu F$ ,  $T_a=25^{\circ}C$ , unless otherwise noted)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Output Voltage	$V_{OUT(E)}$ (Note 2)	$I_{OUT}=30mA$ , $V_{IN}=V_{OUT}+1V$	X 0.98	$V_{OUT(T)}$ (Note 1)	X 1.02	V
Maximum Output Current	$I_{OUTMAX}$	$V_{IN}=V_{OUT}+1V$		450		mA
Load Regulation	$\Delta V_{OUT}$	$V_{IN}=V_{OUT}+1V$ , $1mA \leq I_{OUT} \leq 100mA$		7		mV
Dropout Voltage (Note 1)	$V_{DIF1}$	$I_{OUT}=100mA$		110		mV
	$V_{DIF2}$	$I_{OUT}=200mA$		220		mV
Supply Current	$I_{SS}$	$V_{IN}=V_{OUT}+1V$		50		$\mu A$
Stand-by Current	$I_{CEL}$	$V_{CE}=0V$		0		$\mu A$
Line Regulation	$\frac{\Delta V_{OUT}}{\Delta V_{IN} \cdot V_{OUT}}$	$I_{OUT}=40mA$ $V_{OUT}+1V \leq V_{IN} \leq 6.5V$		0.04		%/V
CE“High”Voltage	$V_{CEH}$	Start up	1.0			V
CE “Low” Voltage	$V_{CEL}$	Shut down			0.5	V
Output noise	EN	$I_{OUT}=40mA$ , 300Hz~50kHz		50		$\mu V_{rms}$
Ripple Rejection Rate	PSRR	$V_{IN}=[V_{OUT}+1]V+1$ $V_{p-pAC}$	$I_{OUT}=10mA, 1kHz$		70	dB
			$I_{OUT}=100mA, 10kHz$		62	
			$I_{OUT}=200mA, 10kHz$		62	
Short-circuit Current	$I_{SHORT}$	$V_{IN}=V_{OUT}+1V, V_{CE}=V_{IN}, V_{OUT}=0V$			120	mA

## ME6211C30

( $V_{IN}=V_{OUT}+1V$ ,  $V_{CE}=V_{IN}$ ,  $C_{IN}=C_L=1\mu F$ ,  $T_a=25^{\circ}C$ , unless otherwise noted)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Output Voltage	$V_{OUT(E)}$ (Note 2)	$I_{OUT}=30mA$ , $V_{IN}=V_{OUT}+1V$	X 0.98	$V_{OUT(T)}$ (Note 1)	X 1.02	V
Maximum Output Current	$I_{OUTMAX}$	$V_{IN}=V_{OUT}+1V$		500		mA
Load Regulation	$\Delta V_{OUT}$	$V_{IN}=V_{OUT}+1V$ , $1mA \leq I_{OUT} \leq 100mA$		8		mV
Dropout Voltage (Note 1)	$V_{DIF1}$	$I_{OUT}=100mA$		100		mV
	$V_{DIF2}$	$I_{OUT}=200mA$		210		mV
Supply Current	$I_{SS}$	$V_{IN}=V_{OUT}+1V$		60		$\mu A$
Stand-by Current	$I_{CEL}$	$V_{CE}=0V$		0		$\mu A$
Line Regulation	$\frac{\Delta V_{OUT}}{\Delta V_{IN} \cdot V_{OUT}}$	$I_{OUT}=40mA$ $V_{OUT}+1V \leq V_{IN} \leq 6.5V$		0.05		%/V
CE “High”	$V_{CEH}$	Start up	1.0			V

Voltage						
CE "Low" Voltage	V <sub>CEL</sub>	Shut down			0.5	V
Output noise	EN	I <sub>OUT</sub> =40mA, 300Hz~50kHz		50		uVrms
Ripple Rejection Rate	PSRR	V <sub>IN</sub> = [V <sub>OUT</sub> +1]V +1Vp-pAC	I <sub>OUT</sub> =10mA,1kHz		70	dB
			I <sub>OUT</sub> =100mA,10kHz		62	
			I <sub>OUT</sub> =200mA,10kHz		62	
Short-circuit Current	I <sub>SHORT</sub>	V <sub>IN</sub> = V <sub>OUT</sub> +1V, V <sub>CE</sub> =V <sub>IN</sub> , V <sub>OUT</sub> =0V		120		mA

## ME6211C33

(V<sub>IN</sub>= V<sub>OUT</sub>+1V, V<sub>CE</sub> = V<sub>IN</sub>, C<sub>IN</sub>=C<sub>L</sub>=1uF, Ta=25°C, unless otherwise noted)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Output Voltage	V <sub>OUT</sub> (E) (Note 2)	I <sub>OUT</sub> =30mA, V <sub>IN</sub> = V <sub>OUT</sub> +1V	X 0.98	V <sub>OUT</sub> (T) (Note 1)	X 1.02	V
Maximum Output Current	I <sub>OUTMAX</sub>	V <sub>IN</sub> = V <sub>OUT</sub> +1V		500		mA
Load Regulation	ΔV <sub>OUT</sub>	V <sub>IN</sub> = V <sub>OUT</sub> +1V , 1mA≤I <sub>OUT</sub> ≤100mA		9		mV
Dropout Voltage (Note 1)	V <sub>DIF1</sub>	I <sub>OUT</sub> =100mA		120		mV
	V <sub>DIF2</sub>	I <sub>OUT</sub> =200mA		260		mV
Supply Current	I <sub>SS</sub>	V <sub>IN</sub> = V <sub>OUT</sub> +1V		60		μA
Stand-byCurrent	I <sub>CEL</sub>	V <sub>CE</sub> =0V		0.1		μA
Line Regulation	$\frac{\Delta V_{OUT}}{\Delta V_{IN} \cdot V_{OUT}}$	I <sub>OUT</sub> =40mA V <sub>OUT</sub> +1V ≤V <sub>IN</sub> ≤6.5V		0.05		%/V
CE "High" Voltage	V <sub>CEH</sub>	Start up	1.0			V
CE "Low" Voltage	V <sub>CEL</sub>	Shut down			0.5	V
Output noise	EN	I <sub>OUT</sub> =40mA, 300Hz~50kHz		50		uVrms
Ripple Rejection Rate	PSRR	V <sub>IN</sub> = [V <sub>OUT</sub> +1]V +1Vp-pAC	I <sub>OUT</sub> =10mA,1kHz		70	dB
			I <sub>OUT</sub> =100mA,10kHz		62	
			I <sub>OUT</sub> =200mA,10kHz		62	
Short-circuit Current	I <sub>SHORT</sub>	V <sub>IN</sub> = V <sub>OUT</sub> +1V, V <sub>CE</sub> =V <sub>IN</sub> , V <sub>OUT</sub> =0V		150		mA

## ME6211C50

(V<sub>IN</sub>= V<sub>OUT</sub>+1V, V<sub>CE</sub> = V<sub>IN</sub>, C<sub>IN</sub>=C<sub>L</sub>=1uF, Ta=25°C, unless otherwise noted)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Output Voltage	V <sub>OUT</sub> (E) (Note 2)	I <sub>OUT</sub> =30mA, V <sub>IN</sub> = V <sub>OUT</sub> +1V	X 0.98	V <sub>OUT</sub> (T) (Note 1)	X 1.02	V

Maximum Output Current	I <sub>OUTMAX</sub>	V <sub>IN</sub> = V <sub>OUT</sub> +1V			500		mA
Load Regulation	ΔV <sub>OUT</sub>	V <sub>IN</sub> = V <sub>OUT</sub> +1V , 1mA≤I <sub>OUT</sub> ≤100mA			8		mV
Dropout Voltage (Note 1)	V <sub>DIF1</sub>	I <sub>OUT</sub> =100mA			100		mV
	V <sub>DIF2</sub>	I <sub>OUT</sub> =200mA			200		mV
Supply Current	I <sub>SS</sub>	V <sub>IN</sub> = V <sub>OUT</sub> +1V			40		μA
Stand-by Current	I <sub>CEL</sub>	V <sub>CE</sub> =0V			0		μA
Line Regulation	$\frac{\Delta V_{OUT}}{\Delta V_{IN} \cdot V_{OUT}}$	I <sub>OUT</sub> =40mA V <sub>OUT</sub> +1V ≤V <sub>IN</sub> ≤6.5V			0.05		%/V
CE “High” Voltage	V <sub>CEH</sub>	Start up		1.0			V
CE “Low” Voltage	V <sub>CEL</sub>	Shut down				0.7	V
Output noise	EN	I <sub>OUT</sub> =40mA, 300Hz~50kHz			50		uVrms
Ripple Rejection Rate	PSRR	V <sub>IN</sub> = [V <sub>OUT</sub> +1]V +1Vp-pAC	I <sub>OUT</sub> =10mA,1kHz		70		dB
			I <sub>OUT</sub> =100mA,10kHz		62		
			I <sub>OUT</sub> =200mA,10kHz		62		
Short-circuit Current	I <sub>SHORT</sub>	V <sub>IN</sub> = V <sub>OUT</sub> +1V, V <sub>CE</sub> =V <sub>IN</sub> , V <sub>OUT</sub> =0V			110		mA

## ME6211A30

( $V_{IN} = V_{OUT} + 1V, C_{IN} = C_L = 1\mu F, T_a = 25^\circ C$ , unless otherwise noted)

Parameter	Symbol	Conditions		Min.	Typ.	Max.	Units
Output Voltage	V <sub>OUT</sub> (E) (Note 2)	I <sub>OUT</sub> =30mA, V <sub>IN</sub> = V <sub>OUT</sub> +1V		X 0.98	V <sub>OUT</sub> (T) (Note 1)	X 1.02	V
Maximum Output Current	I <sub>OUTMAX</sub>	V <sub>IN</sub> = V <sub>OUT</sub> +1V			500		mA
Load Regulation	ΔV <sub>OUT</sub>	V <sub>IN</sub> = V <sub>OUT</sub> +1V , 1mA≤I <sub>OUT</sub> ≤100mA			8		mV
Dropout Voltage (Note 1)	V <sub>DIF1</sub>	I <sub>OUT</sub> =100mA			100		mV
	V <sub>DIF2</sub>	I <sub>OUT</sub> =200mA			210		mV
Supply Current	I <sub>SS</sub>	V <sub>IN</sub> = V <sub>OUT</sub> +1V			60		μA
Line Regulation	$\frac{\Delta V_{OUT}}{\Delta V_{IN} \cdot V_{OUT}}$	I <sub>OUT</sub> =40mA V <sub>OUT</sub> +1V ≤V <sub>IN</sub> ≤6.5V			0.05		%/V
Output noise	EN	I <sub>OUT</sub> =40mA, 300Hz~50kHz			50		uVrms
Ripple Rejection Rate	PSRR	V <sub>IN</sub> = [V <sub>OUT</sub> +1]V +1Vp-pAC	I <sub>OUT</sub> =10mA,1kHz		70		dB
			I <sub>OUT</sub> =100mA,10kHz		62		
			I <sub>OUT</sub> =200mA,10kHz		62		
Short-circuit Current	I <sub>SHORT</sub>	V <sub>IN</sub> = V <sub>OUT</sub> +1V, V <sub>CE</sub> =V <sub>IN</sub> , V <sub>OUT</sub> =0V			120		mA



## ME6211A33

( $V_{IN} = V_{OUT} + 1V$ ,  $C_{IN} = C_L = 1\mu F$ ,  $T_a = 25^\circ C$ , unless otherwise noted)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Output Voltage	$V_{OUT}(E)$ (Note 2)	$I_{OUT} = 30mA$ , $V_{IN} = V_{OUT} + 1V$	X 0.98	$V_{OUT}(T)$ (Note 1)	X 1.02	V
Maximum Output Current	$I_{OUTMAX}$	$V_{IN} = V_{OUT} + 1V$		500		mA
Load Regulation	$\Delta V_{OUT}$	$V_{IN} = V_{OUT} + 1V$ , $1mA \leq I_{OUT} \leq 100mA$		9		mV
Dropout Voltage (Note 1)	$V_{DIF1}$	$I_{OUT} = 100mA$		120		mV
	$V_{DIF2}$	$I_{OUT} = 200mA$		260		mV
Supply Current	$I_{SS}$	$V_{IN} = V_{OUT} + 1V$		60		$\mu A$
Line Regulation	$\frac{\Delta V_{OUT}}{\Delta V_{IN} \cdot V_{OUT}}$	$I_{OUT} = 40mA$ $V_{OUT} + 1V \leq V_{IN} \leq 6.5V$		0.05		%/V
Output noise	EN	$I_{OUT} = 40mA$ , 300Hz~50kHz		50		$\mu V_{rms}$
Ripple Rejection Rate	PSRR	$V_{IN} = [V_{OUT} + 1]V$ +1Vp-pAC	$I_{OUT} = 10mA, 1kHz$	70		dB
			$I_{OUT} = 100mA, 10kHz$	62		
			$I_{OUT} = 200mA, 10kHz$	62		
Short-circuit Current	$I_{SHORT}$	$V_{IN} = V_{OUT} + 1V$ , $V_{OUT} = 0V$		150		mA

## ME6211A25

( $V_{IN} = V_{OUT} + 1V$ ,  $C_{IN} = C_L = 1\mu F$ ,  $T_a = 25^\circ C$ , unless otherwise noted)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Output Voltage	$V_{OUT}(E)$ (Note 2)	$I_{OUT} = 30mA$ , $V_{IN} = V_{OUT} + 1V$	X 0.98	$V_{OUT}(T)$ (Note 1)	X 1.02	V
Maximum Output Current	$I_{OUTMAX}$	$V_{IN} = V_{OUT} + 1V$		400		mA
Load Regulation	$\Delta V_{OUT}$	$V_{IN} = V_{OUT} + 1V$ , $1mA \leq I_{OUT} \leq 100mA$		9		mV
Dropout Voltage (Note 1)	$V_{DIF1}$	$I_{OUT} = 100mA$		80		mV
	$V_{DIF2}$	$I_{OUT} = 200mA$		180		mV
Supply Current	$I_{SS}$	$V_{IN} = V_{OUT} + 1V$		40		$\mu A$
Line Regulation	$\frac{\Delta V_{OUT}}{\Delta V_{IN} \cdot V_{OUT}}$	$I_{OUT} = 40mA$ $V_{OUT} + 1V \leq V_{IN} \leq 6.5V$		0.05		%/V
Output noise	EN	$I_{OUT} = 40mA$ , 300Hz~50kHz		50		$\mu V_{rms}$
Ripple Rejection Rate	PSRR	$V_{IN} = [V_{OUT} + 1]V$ +1Vp-pAC	$I_{OUT} = 10mA, 1kHz$	70		dB
			$I_{OUT} = 100mA, 10kHz$	62		
			$I_{OUT} = 200mA, 10kHz$	62		
Short-circuit	$I_{SHORT}$	$V_{IN} = V_{OUT} + 1V$ , $V_{OUT} = 0V$		150		mA

Current						
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## ME6211H15

( $V_{IN} = V_{OUT} + 1V$ ,  $V_{CE} = GND$ ,  $C_{IN} = C_L = 1\mu F$ ,  $T_a = 25^\circ C$ , unless otherwise noted)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Output Voltage	$V_{OUT}(E)$ (Note 2)	$I_{OUT} = 30mA$ , $V_{IN} = V_{OUT} + 1V$	X 0.98	$V_{OUT}(T)$ (Note 1)	X 1.02	V
Maximum Output Current	$I_{OUTMAX}$	$V_{IN} = V_{OUT} + 1V$		300		mA
Load Regulation	$\Delta V_{OUT}$	$V_{IN} = V_{OUT} + 1V$ , $1mA \leq I_{OUT} \leq 100mA$		9		mV
Dropout Voltage (Note 1)	$V_{DIF1}$	$I_{OUT} = 100mA$		200		mV
	$V_{DIF2}$	$I_{OUT} = 200mA$		400		mV
Supply Current	$I_{SS}$	$V_{IN} = V_{OUT} + 1V$		40		$\mu A$
Stand-by Current	$I_{CEL}$	$V_{CE} = V_{IN}$		0.1		$\mu A$
Line Regulation	$\frac{\Delta V_{OUT}}{\Delta V_{IN} \cdot V_{OUT}}$	$I_{OUT} = 40mA$ $V_{OUT} + 1V \leq V_{IN} \leq 6.5V$		0.05		%/V
CE "High" Voltage	$V_{CEH}$	Shut down	1.0			V
CE "Low" Voltage	$V_{CEL}$	Start up			0.4	V
Output noise	EN	$I_{OUT} = 40mA$ , 300Hz~50kHz		50		$\mu V_{rms}$
Ripple Rejection Rate	PSRR	$V_{IN} = [V_{OUT} + 1]V + 1V$ p-pAC $I_{OUT} = 10mA, 1kHz$		70		dB

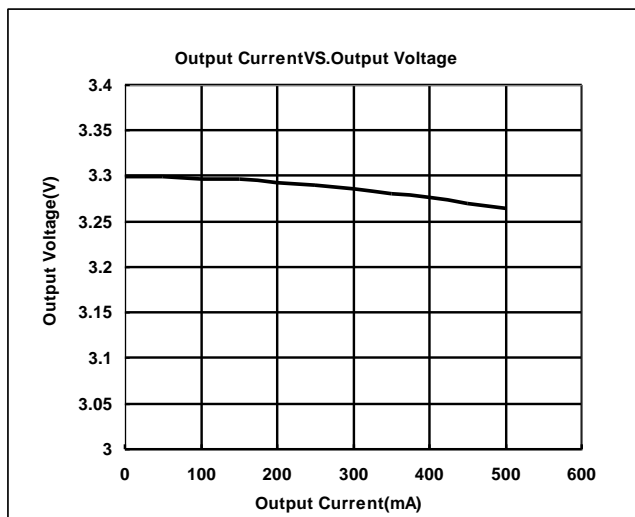
Note :

1.  $V_{OUT}(T)$  : Specified Output Voltage
2.  $V_{OUT}(E)$  : Effective Output Voltage ( i.e. The output voltage when " $V_{OUT}(T) + 1.0V$ " is provided 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.

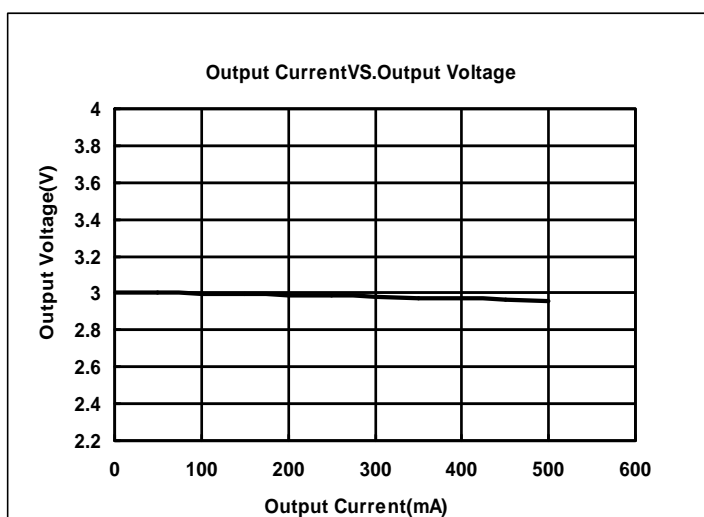
## Type Characteristics

(1) Output Current VS. Output Voltage ( $V_{IN}=V_{out}+1$ ,  $T_a = 25^\circ\text{C}$ )

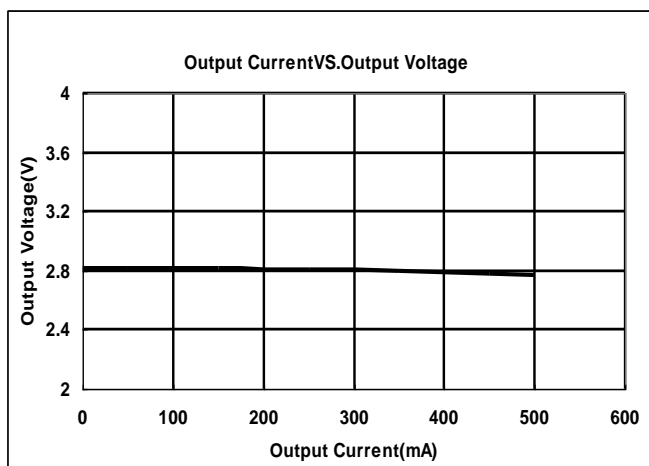
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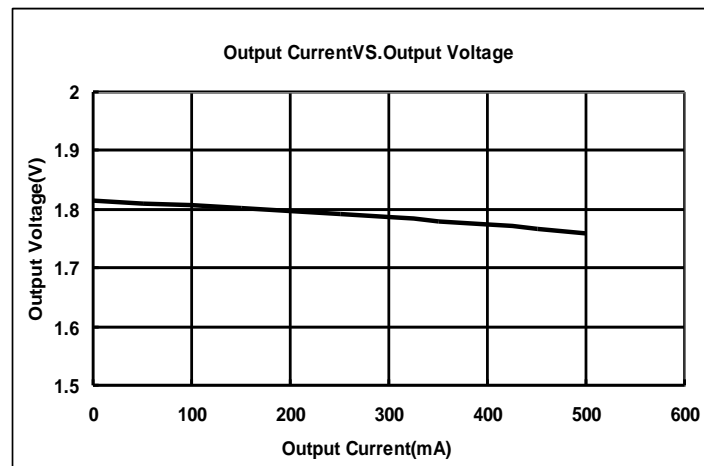
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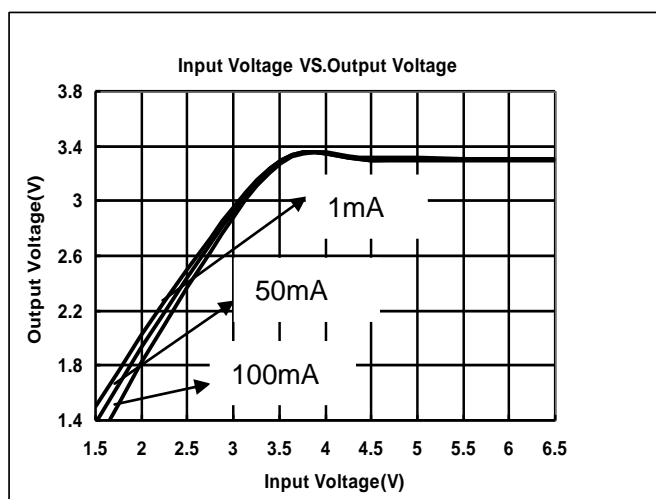


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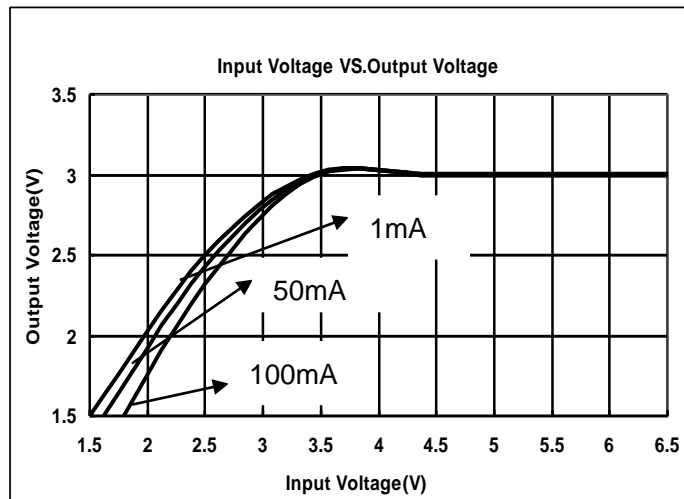


(2) Input Voltage VS. Output Voltage ( $T_a = 25^\circ\text{C}$ )

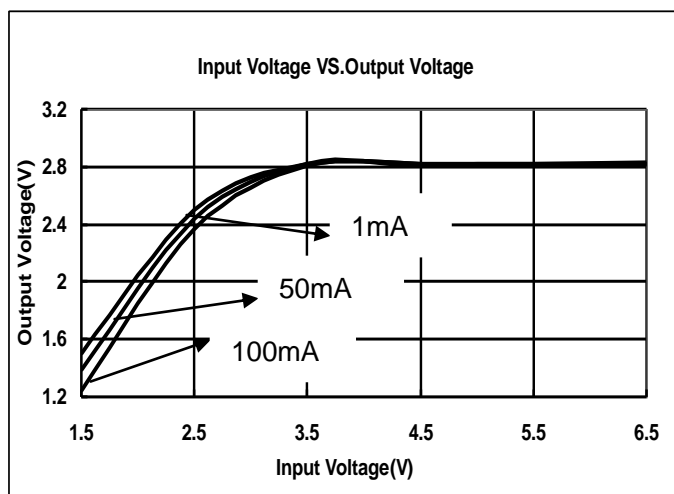
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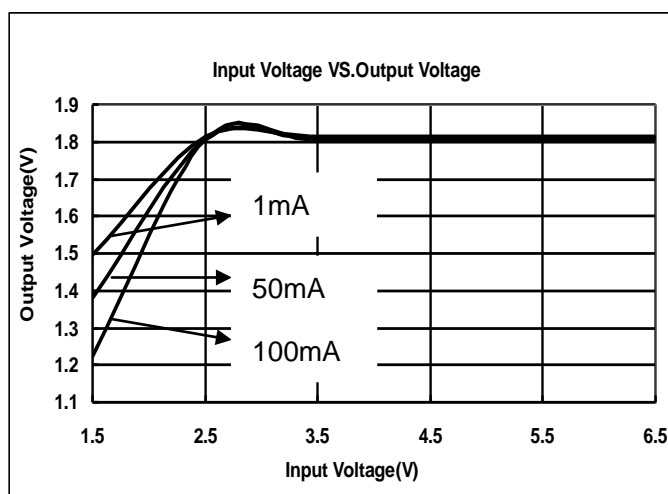
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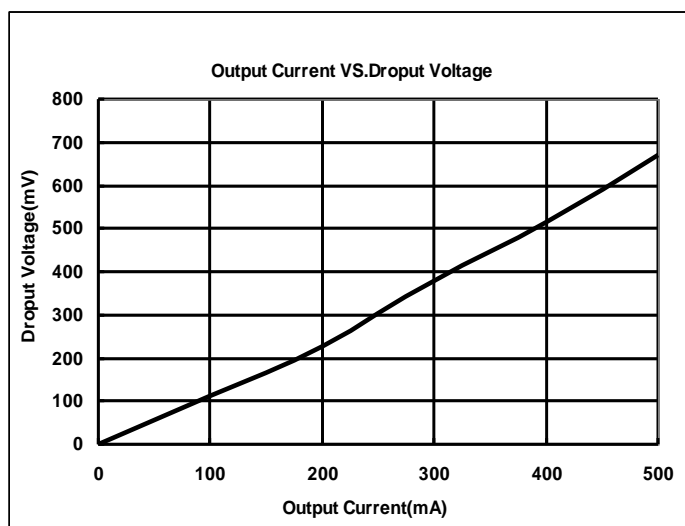


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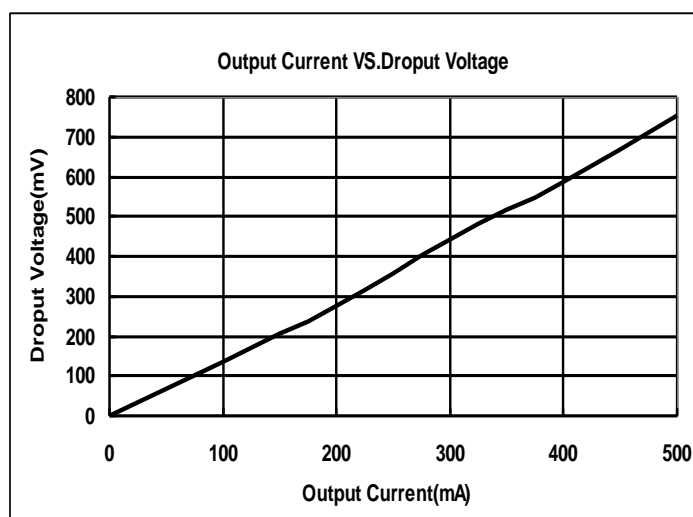


(3) Output Current VS. Dropout Voltage ( $V_{IN}=V_{out}+1V, T_a = 25^\circ C$ )

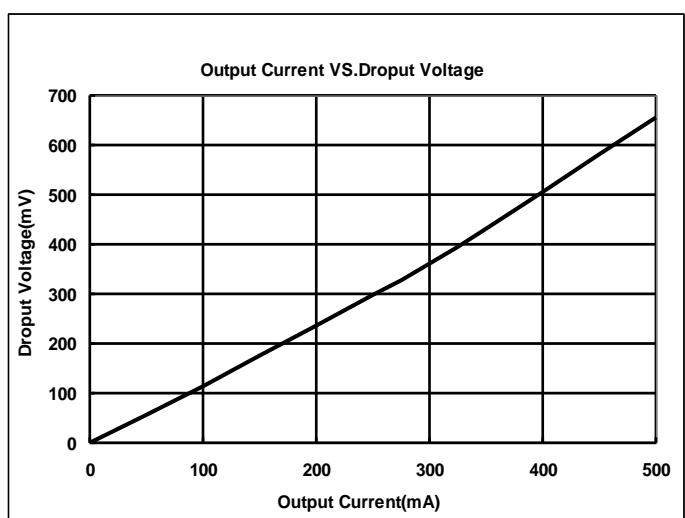
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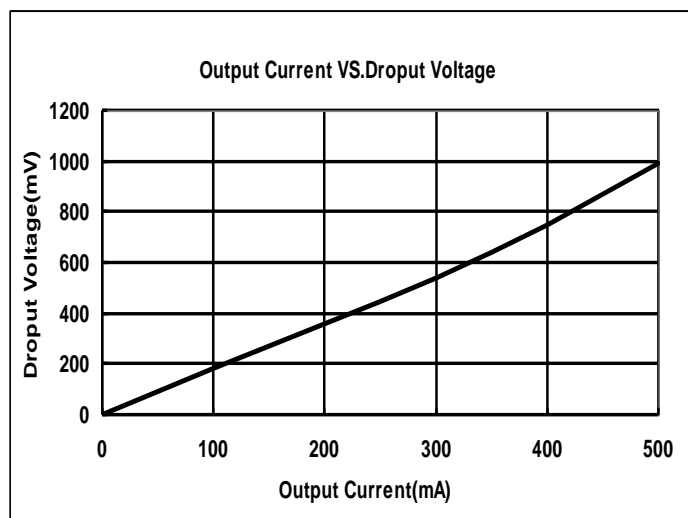
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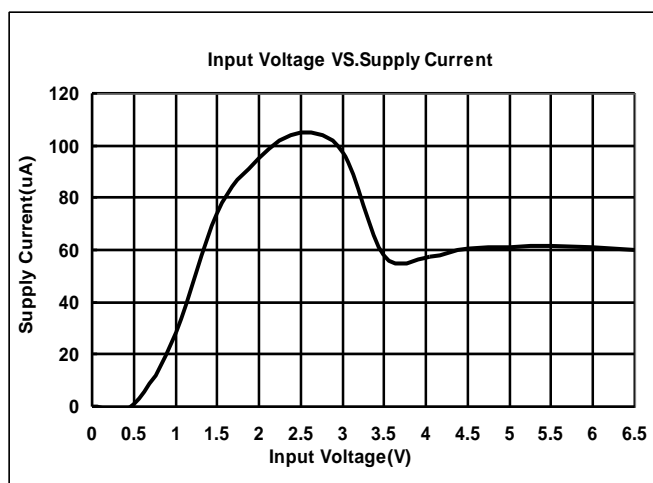


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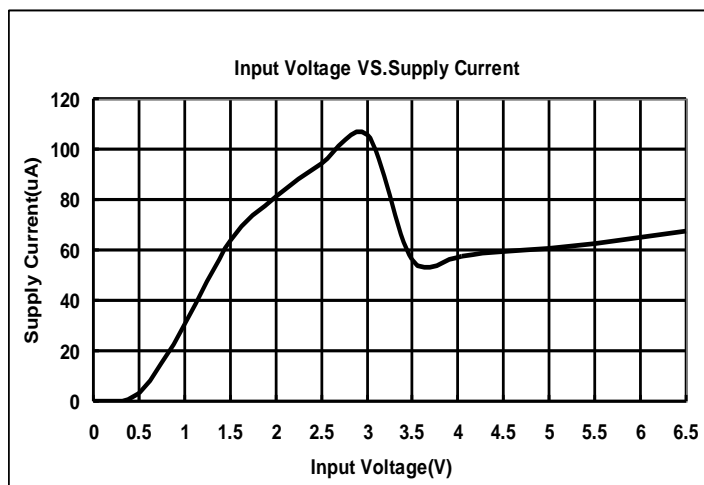


(4) Input Voltage VS. Supply Current ( $T_a = 25^\circ\text{C}$ )

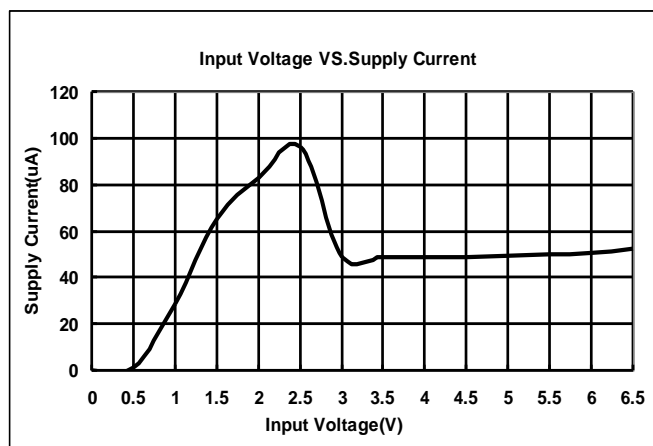
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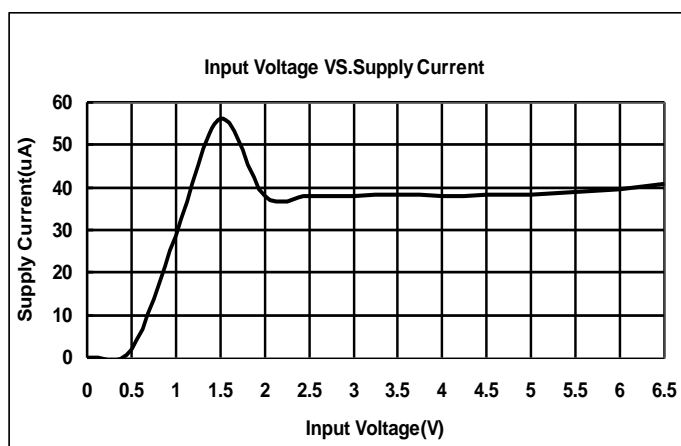
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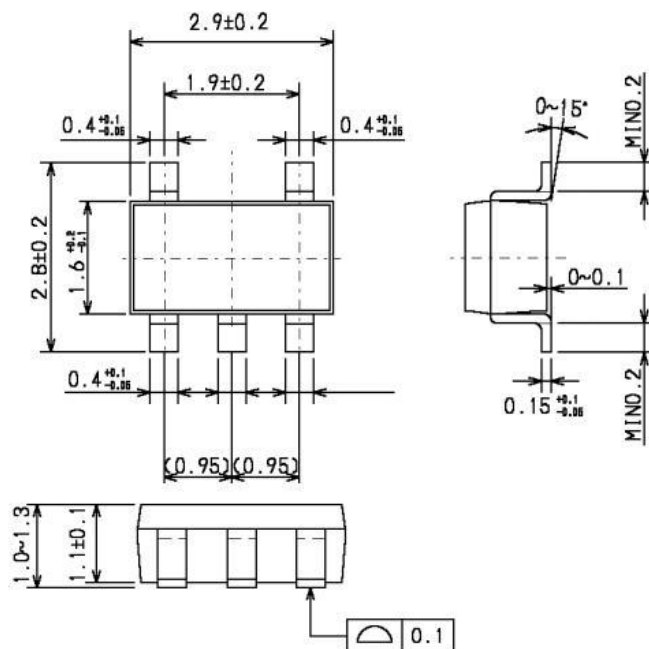


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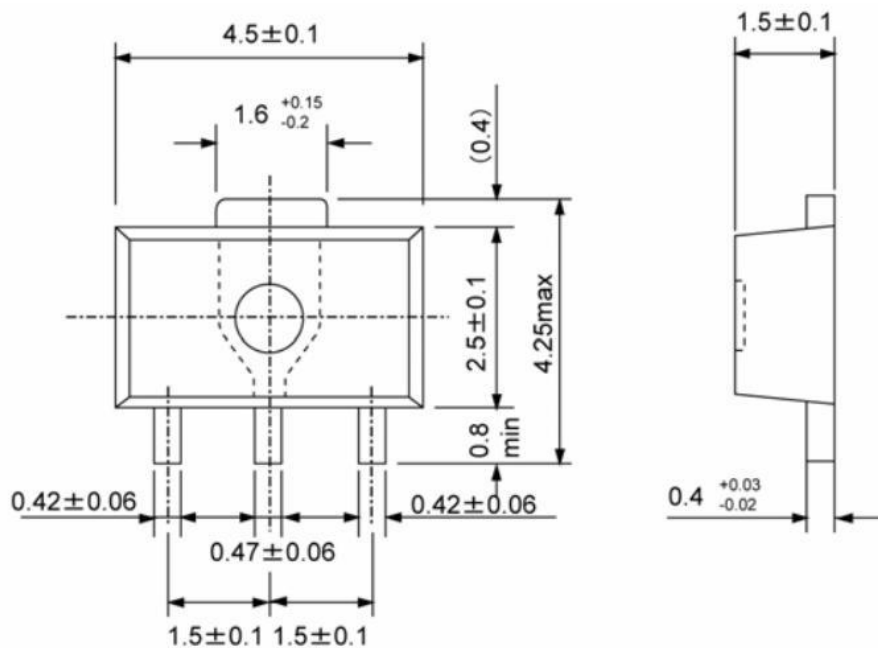


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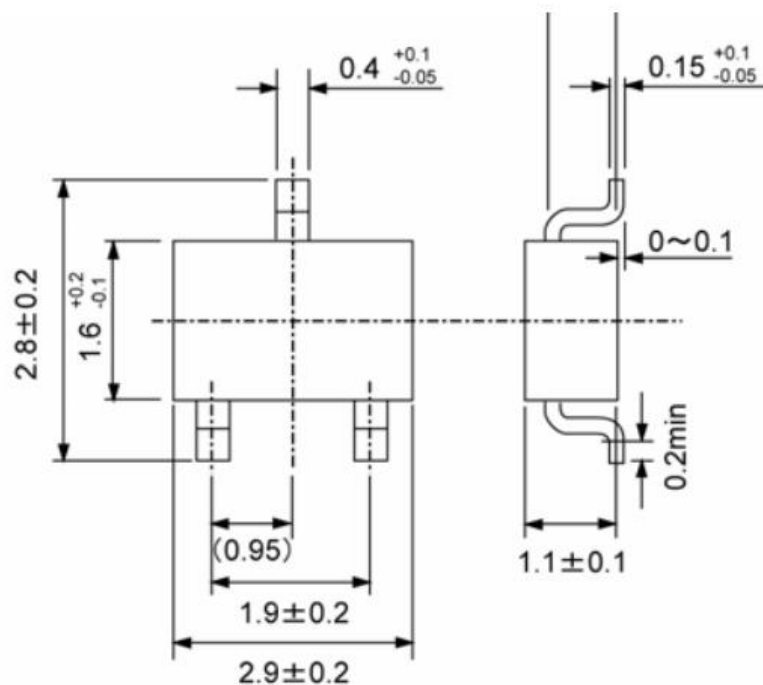
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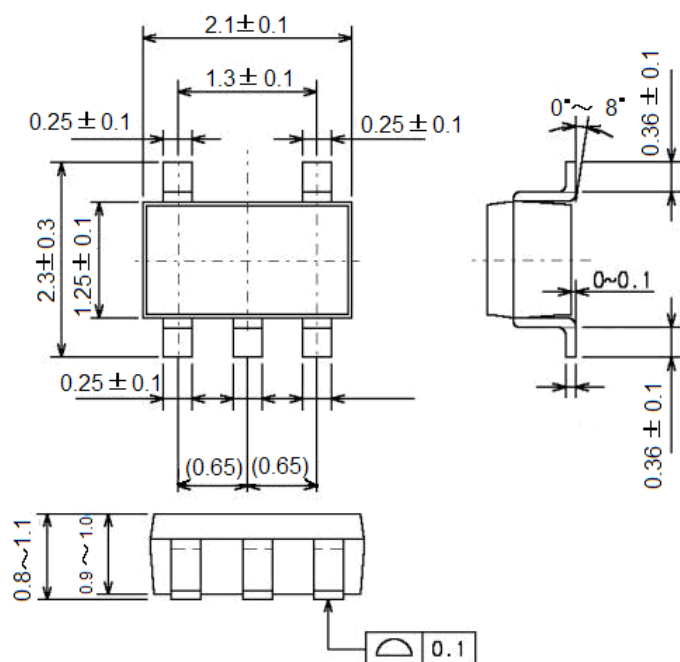
### ● SOT89-3



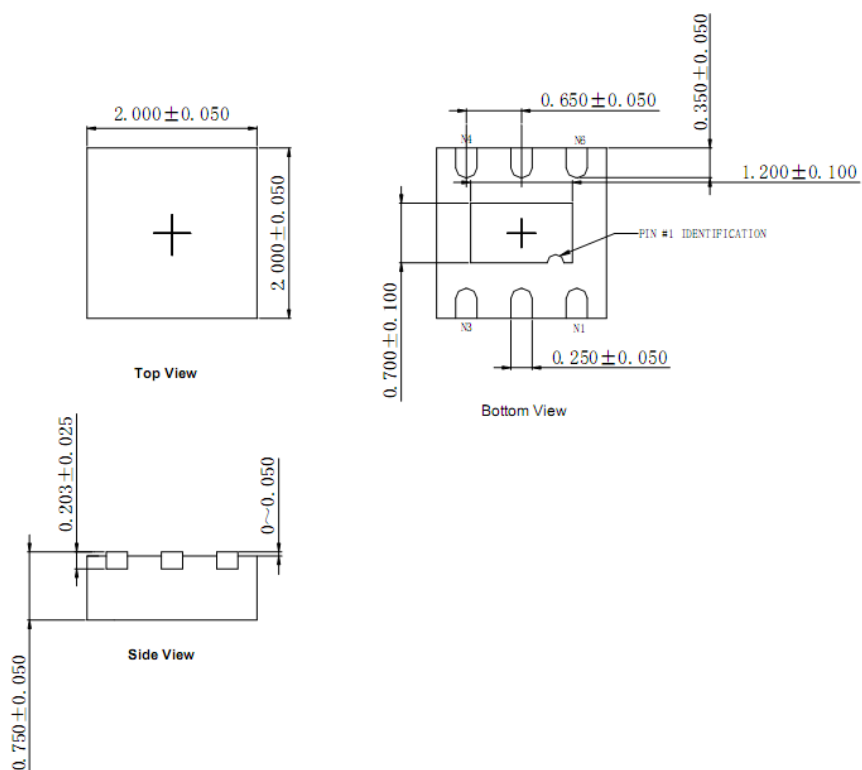
● SOT23-3



● SOT353



● DFN6L





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