

BRCO2600AME

Rev.A Oct.-2024

(8)5 '3+ ©%².Y)359 W+ò- Ý½€•o•ä > òAo•z™Ò z9[¿Å|9~ož
¿â„ ä,€•ÔÅ •V¿ú v f kñYÔđ `... 9ô4C0ÈD} ož

- < zÿß™Òy 40uVrms g10Hz~100kHz h
- < z9[y 80mV@100mA
- < ÿß vy 300mA
- < z²ÁW• vy 35uA

Pinning

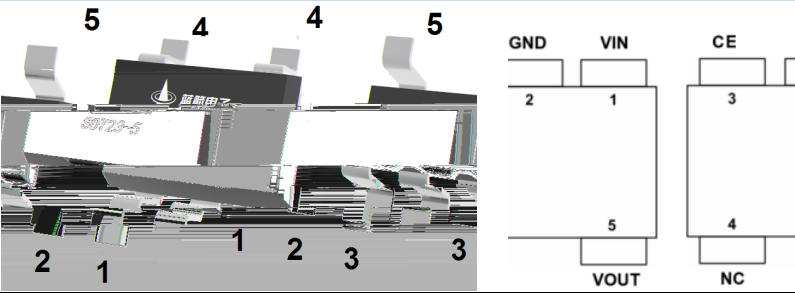


Table with 6 columns: Pin, Symbol, Description, Pin, Symbol, Description. It lists pin 1 as VIN, pin 2 as GND, pin 3 as CE, pin 4 as NC, and pin 5 as VOUT.

Part Number & Marking

Table with 3 columns: Part Number, Output Voltage (V), and Load Regulation. It lists various BRCO2600AME models with output voltages from 1.2V to 3.3V.

Absolute Maximum Ratings(Ta=25 ;)

Table with 4 columns: Parameter, Symbol, Value, and Unit. It lists absolute maximum ratings for input voltage, output voltage, output current, power dissipation, and temperature.

Electrical Characteristics($T_A=25^\circ\text{C}$; , $V_{IN}=V_{OUT}+1\text{V}$, $C_{IN}=C_{OUT}=1\mu\text{F}$, unless otherwise specified)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
V_{IN}	Input Voltage		1.5		6.0	V
V_{OUT_gch}	Output Voltage	$I_{OUT}=1\text{mA}$	$V_{OUT_gsh} \times 0.98$	V_{OUT_gsh}	$V_{OUT_gsh} \times 1.02$	V
I_{SS}	Supply Current	$I_{OUT}=0\text{mA}$		35	75	μA
I_{SHDN}	Shutdown Current	$V_{CE}=0\text{V}$		0.1	1	μA
I_{OUT}	Output Current		300			mA
I_{LIM}	Load Limit Current	$V_{OUT} = 90\%$ $V_{OUT(Normal)}$	500	600		mA
V_{drop}	Dropout Voltage	$I_{OUT}=100\text{mA}$ $V_{OUT_ASA} = 3.3\text{V}$		80		mV
V_{load}	Load Voltage	$V_{IN}=V_{OUT_ASA}+1\text{V}$ $1\text{mA} \leq I_{OUT} \leq 100\text{mA}$		10		mV
$V_{OUT}/(V_{IN} \times V_{OUT})$	Line Regulation	$I_{OUT}=10\text{mA}$ $V_{OUT_ASA}+1\text{V} \leq V_{IN} \leq 0.6\text{V}$		0.01	0.2	%/V
$V_{OUT}/(T_A \times V_{OUT})$	Temperature Coefficient	$I_{OUT}=10\text{mA}$ $-40 \leq T_A \leq 85^\circ\text{C}$		50		ppm/
I_{short}	Short-Circuit Current	$V_{OUT}=V_{SS}$		120		mA
PSRR	PSRR	$I_{OUT}=50\text{mA}$ $f=100\text{Hz}$		78		dB
		$I_{OUT}=50\text{mA}$ $f=1\text{kHz}$		85		
		$I_{OUT}=50\text{mA}$ $f=10\text{kHz}$		75		
V_{CE_H}	High-Level Collector-Emitter Voltage		1.5		V_{IN}	V
V_{CE_L}	Low-Level Collector-Emitter Voltage				0.3	V
T_{SD}	Shutdown Time			160		$^\circ\text{C}$
T_{SD}	Shutdown Time			20		$^\circ\text{C}$
$R_{DISCHRG}$	Discharge Resistance	$V_{IN} = 5\text{V}$, $V_{OUT} = 3.0\text{V}$, $V_{CE} = V_{SS}$		100		

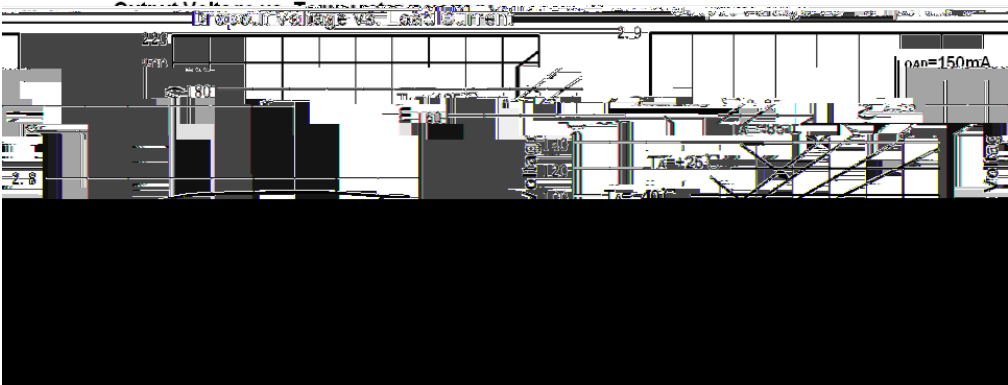
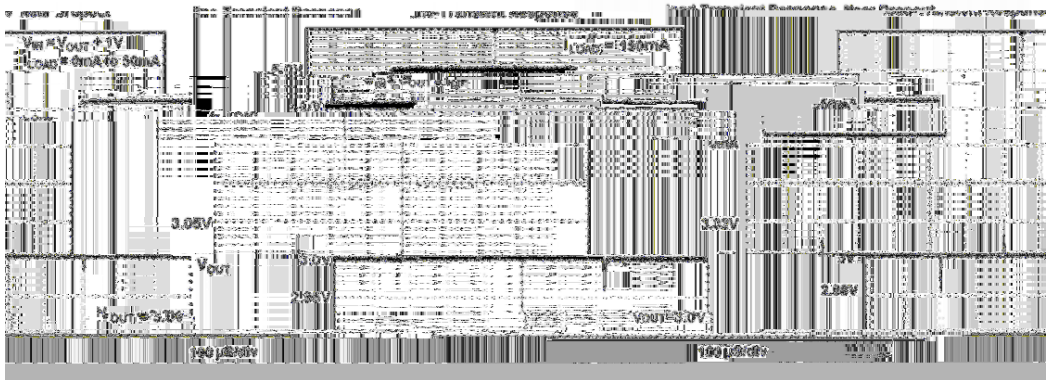
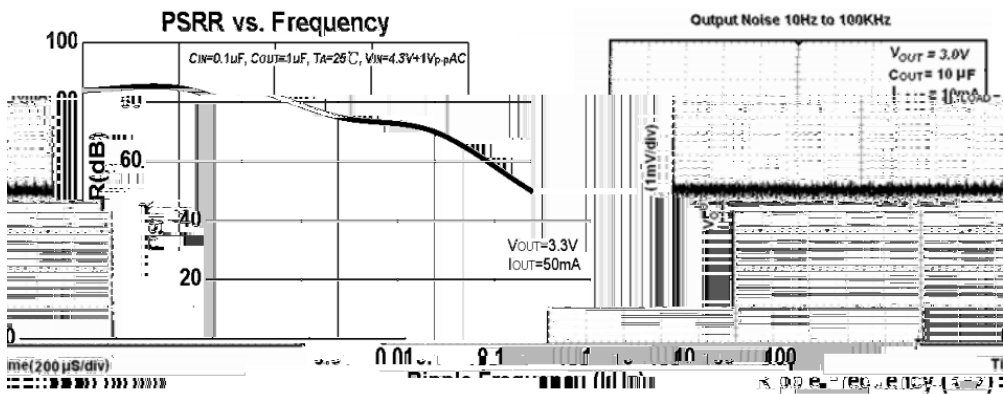
(1) V_{OUT_gch} is the output voltage with $I_{OUT}=1\text{mA}$ and V_{OUT_gsh} is the output voltage with $I_{OUT}=100\text{mA}$.

(2) V_{drop} is the dropout voltage at $I_{OUT}=100\text{mA}$ and V_{OUT_ASA} is the output voltage with $I_{OUT}=100\text{mA}$ and $V_{OUT_ASA} = 3.3\text{V}$. V_{OUT_gsh} is the output voltage with $I_{OUT}=100\text{mA}$ and V_{OUT_gch} is the output voltage with $I_{OUT}=1\text{mA}$.

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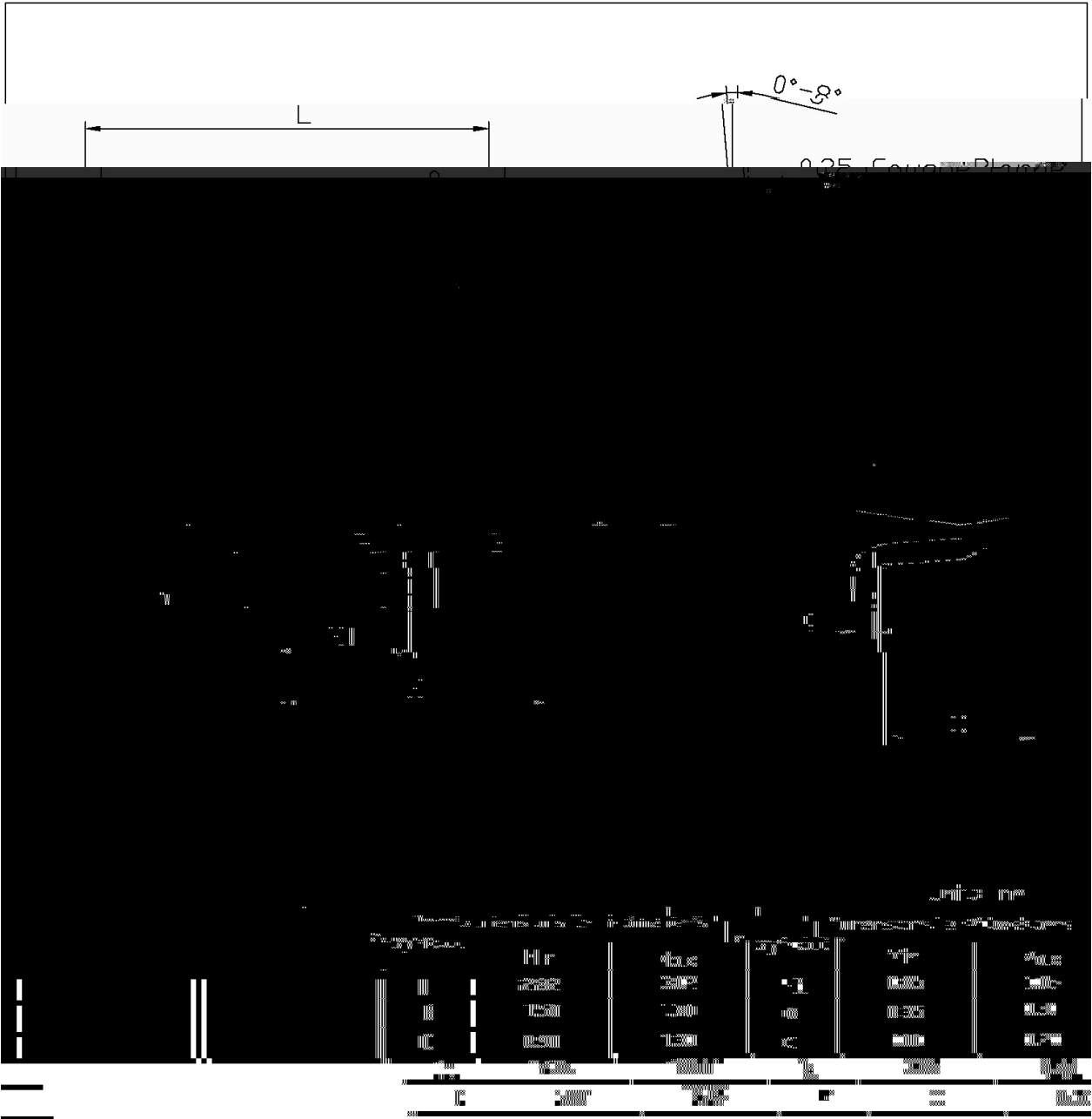
Ô ? d • Ž ¢ + RKIZXOIGR) NGXGIZKXOYZOI) [X \ K



Ô ? d • Ž ¢ +RKIZXOIGR)NGXGIZKXOYZOI) [X\K



Ø □ =) ⌀ / Package Dimensions



SC-23-3

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- 1o• Ä ½ “ † 150 ½180 - k ž • 60 ½90sec;
- 2o• Q > “ † 245 r5 - k ž • 4 Ò 5 r0.5sec;
- 3o•D N ò i Ò 0 , † 2 ½10 - /sec.

Note:

- 1.Preheating:150~180 - , Time:60~90sec.
- 2.Peak Temp.:245 r5 - , Duration:5 r0.5sec.
3. Cooling Speed: 2~10 - /sec.

ÂD /Cã p ¯ »] / Resistance to Soldering Heat Test Conditions

“ † y 260 r5 - ž • y 10 r1 sec.

Temp.:260±5 00>û [•