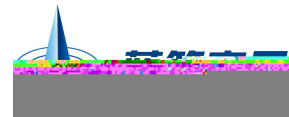


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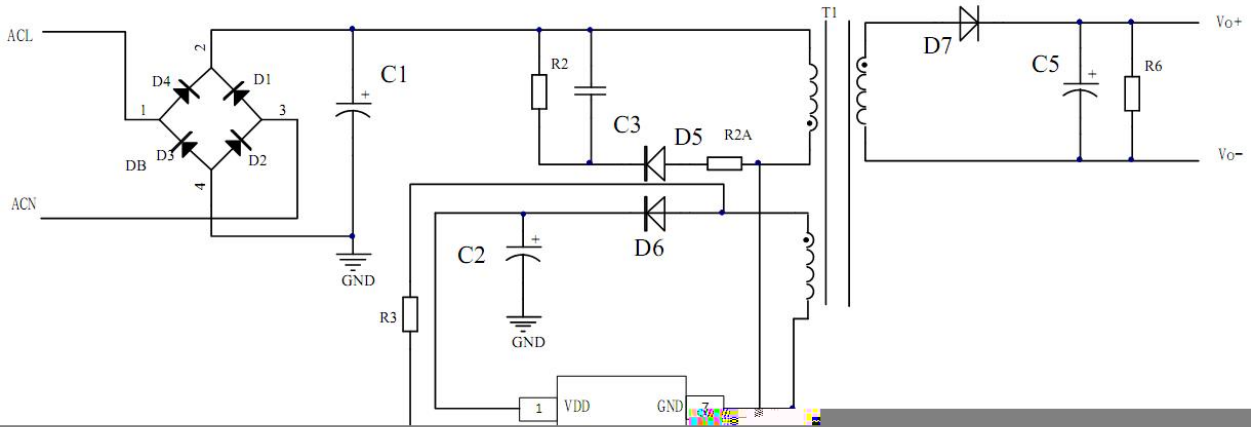
DATA SHEET

/ Revised record

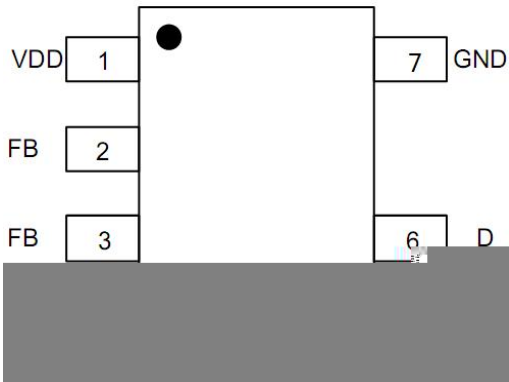
A	6/16	ALL	YC-RM3354S BRAD6315DSA		

BRAD6315DSA

/ Typical Application Circuit



/ Pinning & Description



Pin Number	Pin Name	Description
1	VDD	
2 -3	FB	
4	CS	
5-6	D	MOS
7	GND	

/ Block Diagram

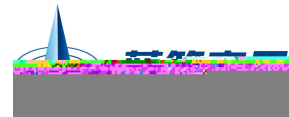


/ Absolute Maximum Ratings(Ta=25)

Parameter	Value	Unit
D Pin Voltage Range	-0.3 to 650	V
V _{DD} DC Clamping Current	10	mA
V _{DD} DC Supply Voltage	-0.3 to 34.5	V
CS Voltage Range	-0.3 to 7	V
FB Voltage Range	-0.7 to 7	V
Package Thermal Resistance	80	°C/W
Maximum Junction Temperature	150	°C
Operating Temperature Range	0 to +125	°C
Storage Temperature Range	-65 to +150	°C
Lead Temperature (Soldering,10sec.)	260	°C
ESD Capability,HBM(Human Body Model)	3000	V
ESD Capability,MM(Machine Model)	250	V

1

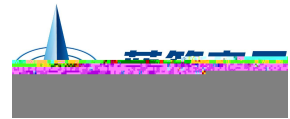
Note 1: If the device operating conditions over the maximum rating of the above-mentioned conditions, may cause permanent damage to the device. The above parameters is only part of the operating conditions the maximum, we do not recommend the device running outside the scope of this specification. If the device to work long hours under the condition of absolute maximum limit, its stability may be affected.



Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Supply Voltage Section(V_{DD} Pin)						
Start-up current into VDD pin	I _{VDD_st}			2	25	uA
Quiescent current into VDD pin	I _Q			0.5	1	mA
Operation Current	I _{VDD_Op}	V _{FB} =1.1V, VDD=18V	0.3	0.7	0.9	mA
VDD Under Voltage Load	OR					

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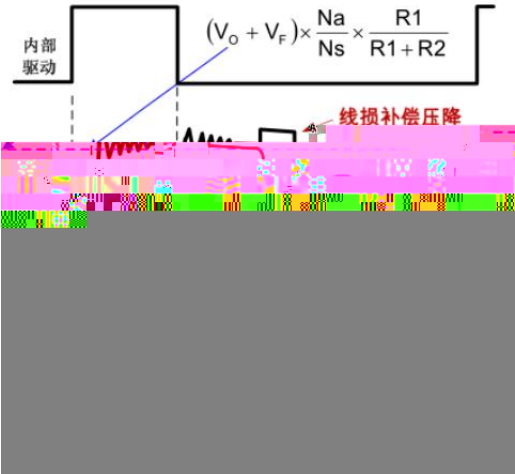
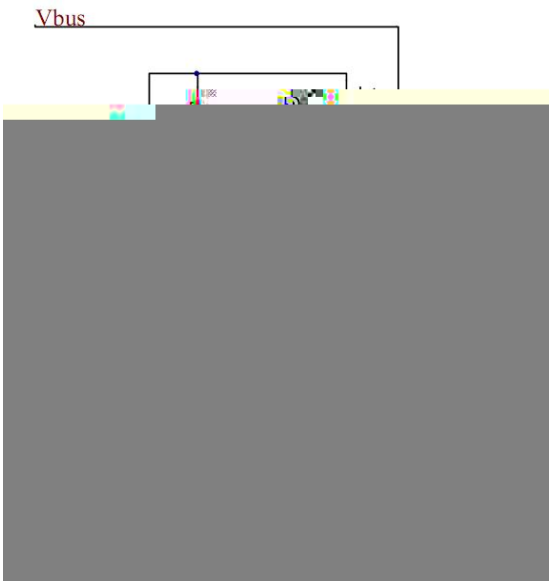
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DATA SHEET

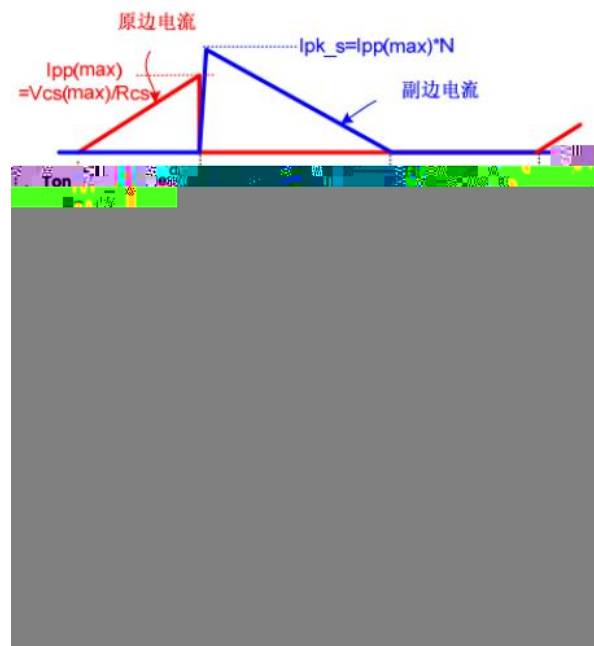


/ Functional Description



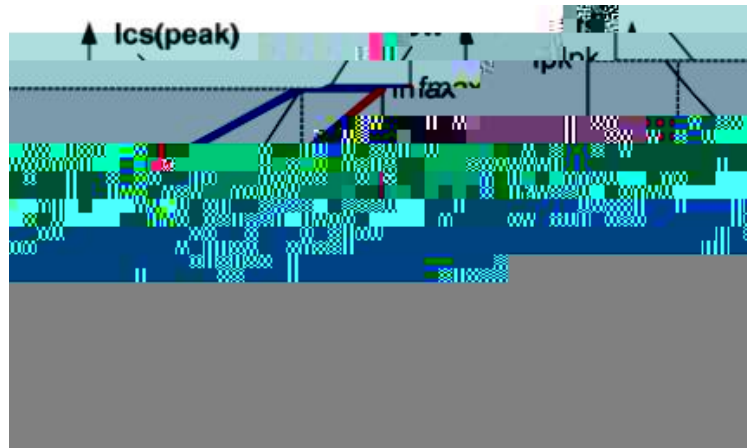
/ Functional Description

$$V_{FB} = (V_O + V_F) \times \frac{N_a}{N_s} \times \frac{R1}{R1 + R2}$$



$$I_{CC_OUT} (mA) \cong \frac{1}{4} \times N \times \frac{500mV}{R_{cs}(\Omega)}$$

/ Functional Description



$$\frac{\Delta V(\text{cable})}{V_{\text{out}}} \approx \frac{I_{\text{cable_max}} \times (R1//R2)}{V_{\text{FB_REF}}} \times 100\%$$

$$\frac{\Delta V(\text{cable})}{V_{\text{out}}} = \frac{36\mu\text{A} \times (3\text{K} // 18\text{K})}{2\text{V}} \times 100\% = 4.6\%$$

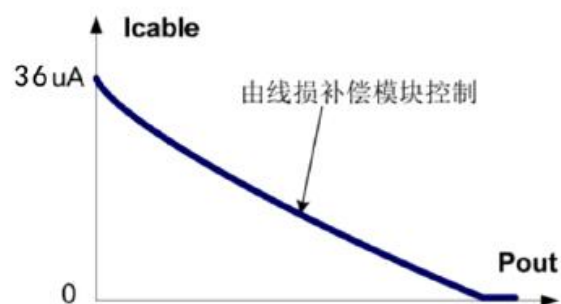
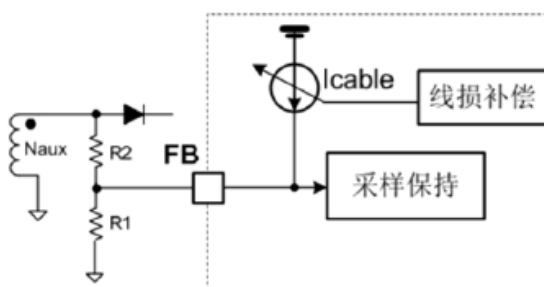
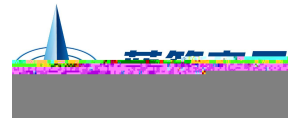


图 5

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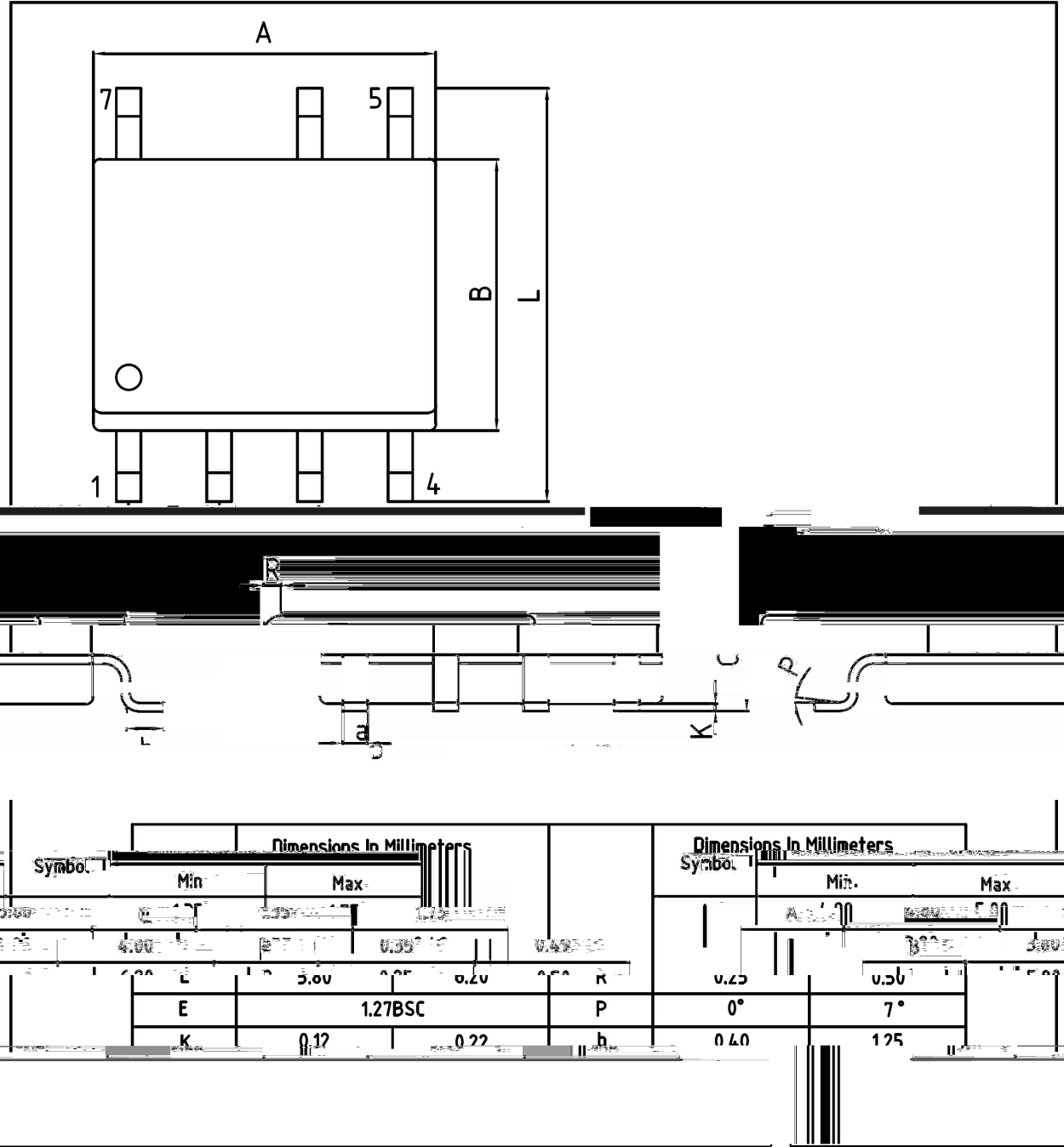


DATA SHEET

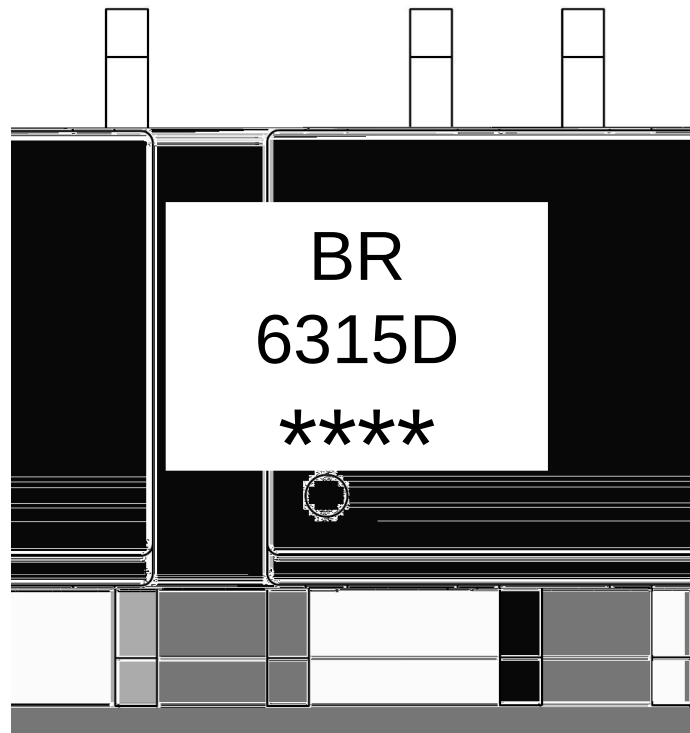
/ Package Dimensions

SOP-7

単位: mm



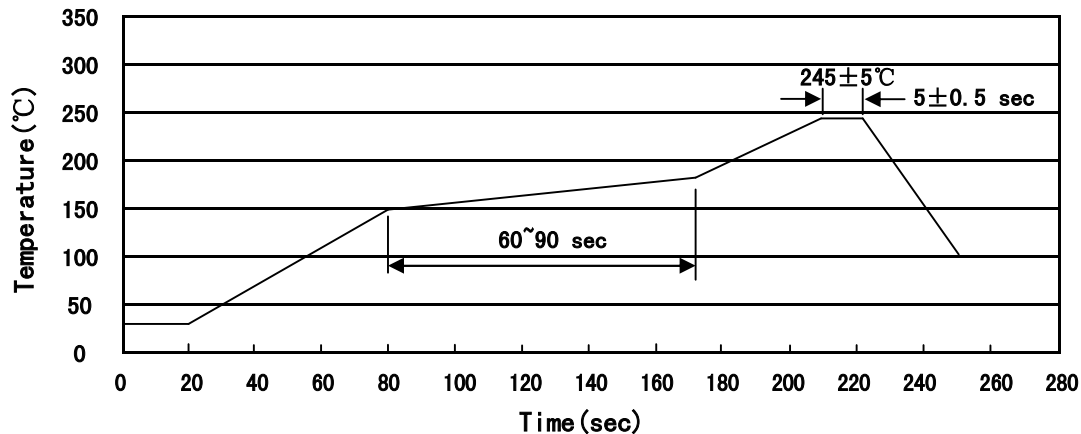
/ Marking Instructions



Note

BR	Company Code
6315D	Product Typ
****	Lot No.Code,code change with Lot No

() /



说明：

- 1、预热温度 150~180°C，时间 60~90sec;
- 2、峰值温度 245±5°C，时间持续为 5±0.5sec;
- 3、焊接制程冷却速度为 2~10°C/sec.

Note:

- 1.Preheating:150~180°C, Time:60~90sec.
- 2.Peak Temp.:245±5°C, Duration:5±0.5sec.
3. Cooling Speed: 2~10°C/sec.

/ Resistance to Soldering Heat Test Conditions

温度：260±5°C

时间：10±1 sec.

Temp.:260±5°C

Time:10±1 sec

/ Packaging SPEC.

卷盘包装 / REEL

Package Type	Units					Dimension (unit mm)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box	Outer Box
SOP-7	4,000	2	8,000	6	48,000	13" ×12	360×360×50	380×335×366

/ Notices