

Rev.J Oct.-2018

SOP-8

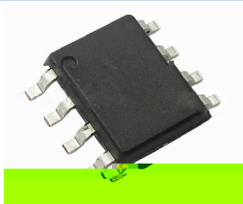
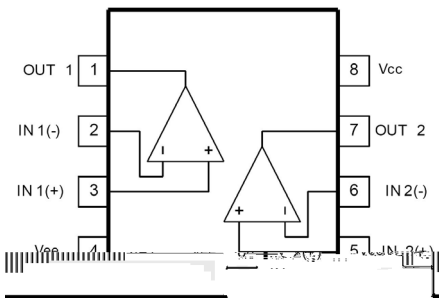
Dual Operational Amplifiers in a SOP-8 Plastic Package.

100dB
 0~V_{CC}-1.5V

V_{CC} = 3V ~36V

Internally frequency compensated for unity gain, Large DC voltage gain : 100dB, Wide operating supply range (V_{CC}=3V~36V), Input common mode voltage includes ground, Large output voltage swing: From 0 to V_{CC}-1.5V, Power drain suitable for battery operation.

Application areas include transducer amplifier, DC gain blocks and all the conventional OP amp circuits.



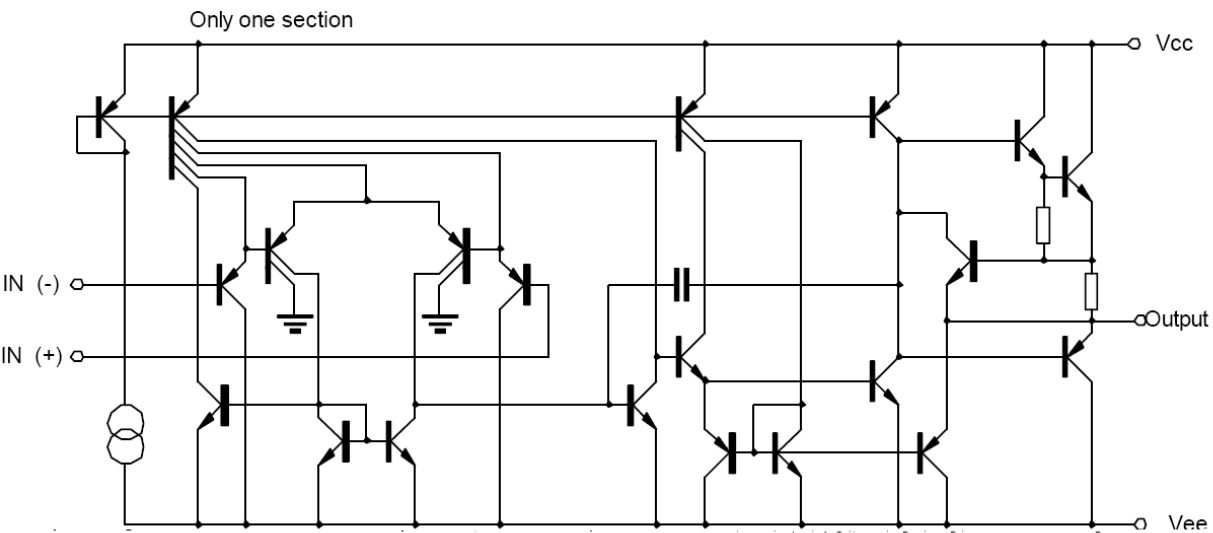
PIN

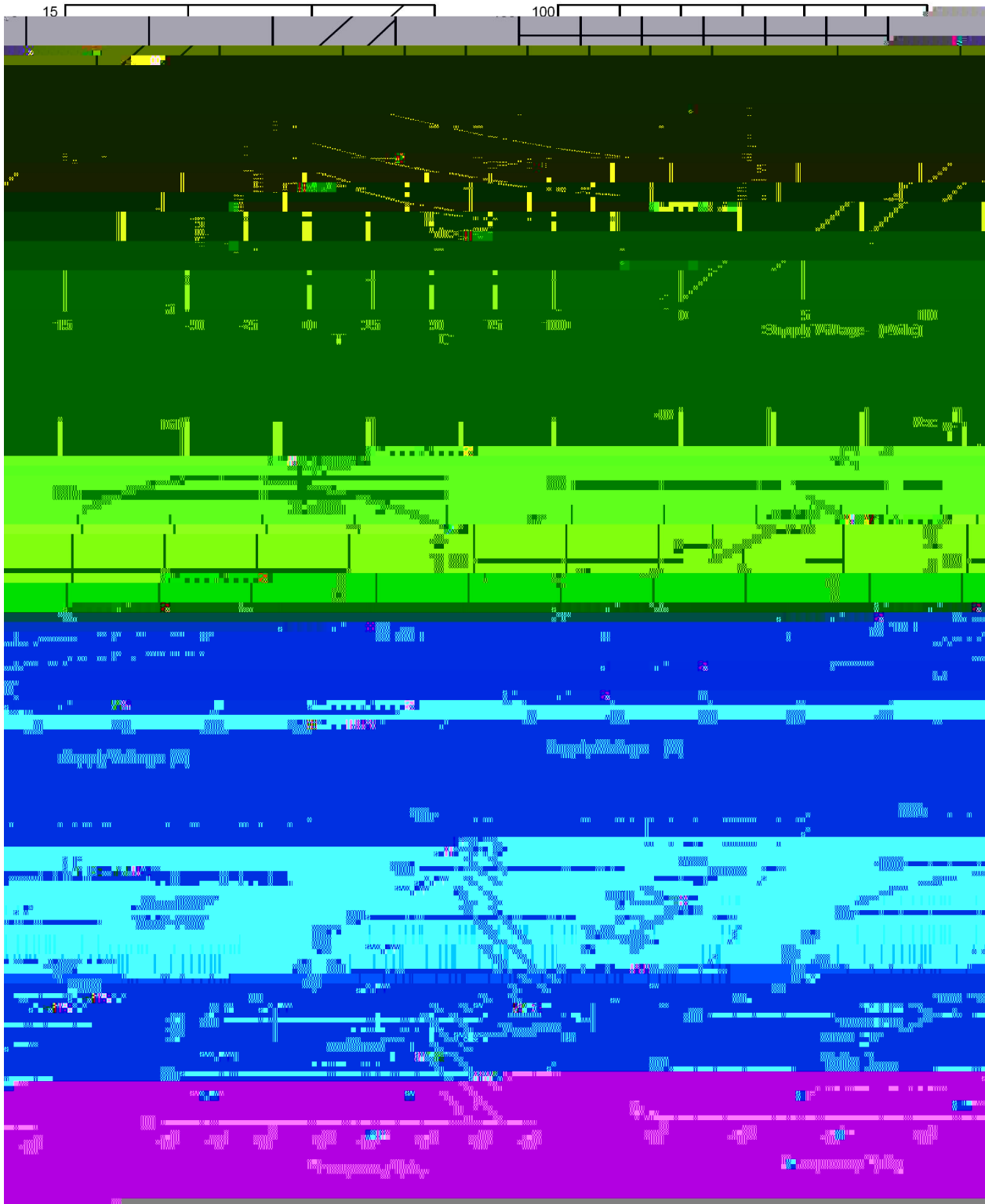
/ PIN See Equivalent Circuit.

/ See Marking Instructions

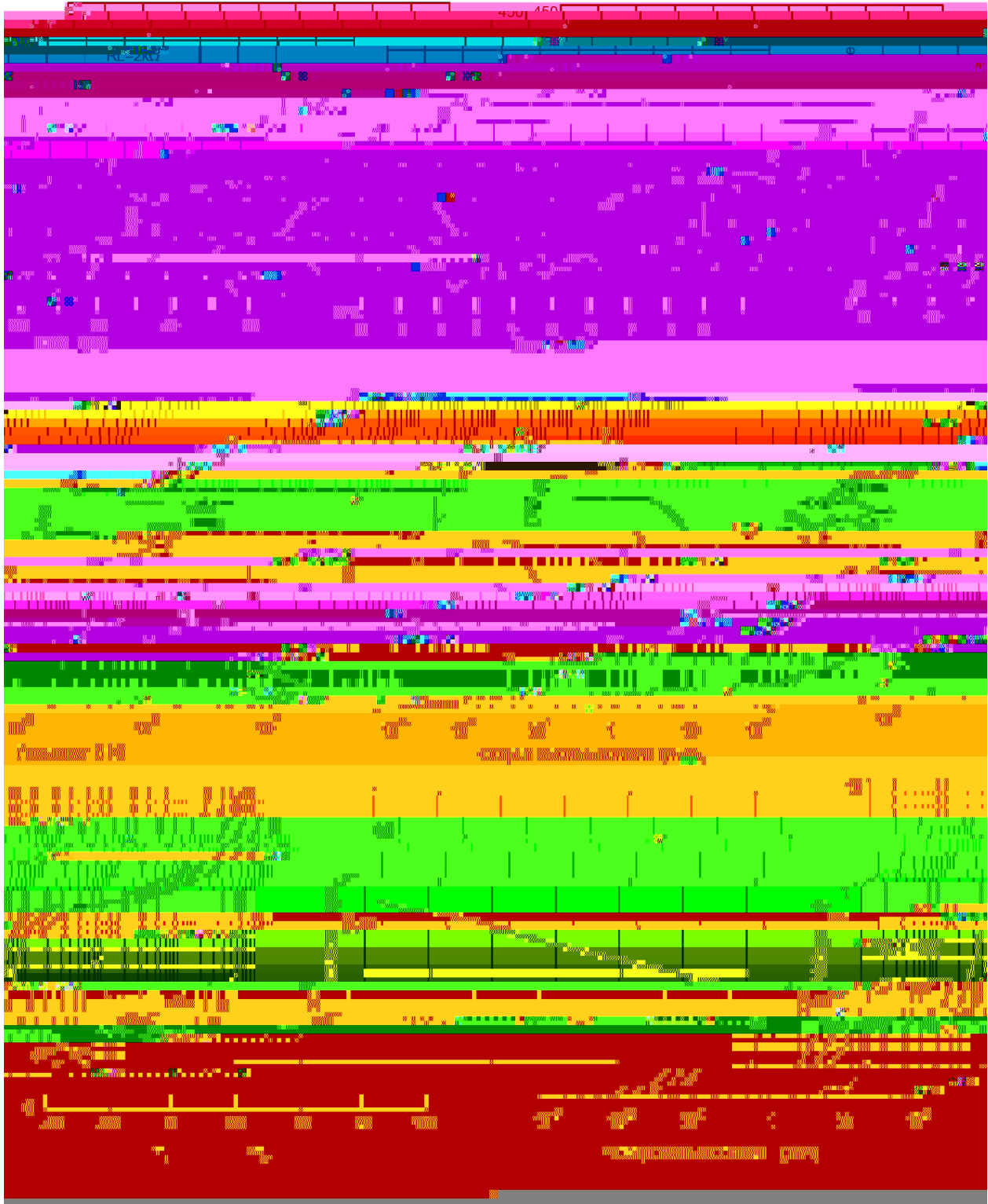
Parameter	Symbol	Rating	Unit
Supply Voltage	V_{CC}	± 18	V
Differential input voltage	$V_{I(DIFF)}$	36	V
Input Voltage	V_I	-0.3~36	V
Power Dissipation	P_d	570	mW
Operating Temperature	T_{opr}	0 ~ 70	
Storage Temperature	T_{stg}	-65 ~ 150	

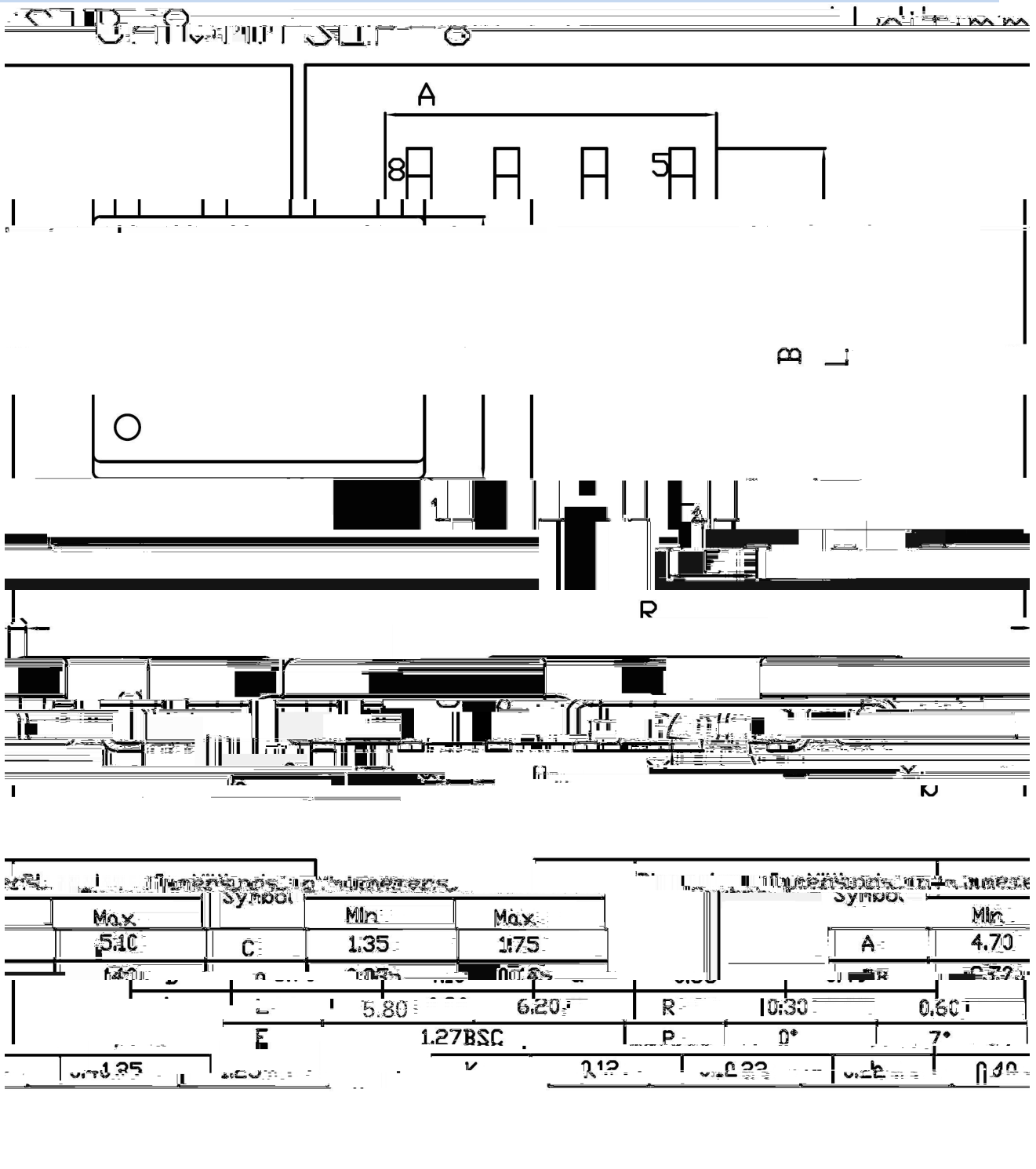
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Input offset voltage	V_{IO}	$V_{CM}=0$ to $V_{CC}-1.5$ $V_{O(p)}=1.4V$ $R_s=0$		2.0	3.0	mV
Input offset current	I_{IO}			2.0	30	nA
Input Bias current	I_b			45	100	nA
Input Commonmode voltage range	$V_{I(R)}$	$V_{CC}=30V$	0	$V_{CC}-1.5$		V
Supply Current	I_{CC}	$R_L=\infty$ $V_{CC}=30V$		0.8	2.0	mA
		$V_{CC}=5V$		0.5	1.2	mA
Large signal Voltage Gain	G_V	$V_{CC}=15V$ $R_L>2k\Omega$ $V_{O(p)}=1V$ to $11V$	25	100		V/mV
Output voltage Swing	$V_{(OH)}$	$V_{CC}=30V$ $R_L=2k\Omega$	26			V
		$V_{CC}=30V$ $R_L=10k\Omega$	27	28		V
	$V_{(OL)}$	$V_{CC}=5V$ $R_L=10k\Omega$		5	20	mV
Commonmode rejection Ratio	CMRR		65	75		dB
Power supply rejection Ratio	PSRR		65	100		dB
Chanel Separation	CS	$f=1kHz$ to $20kHz$		5	20	mV
Short circuit to GND	I_{sc}			40	60	mA
Output current	I_{source}	$V_{I(+)}=1V$ $V_{I(-)}=0$ $V_{CC}=15V$ $V_{O(p)}=2V$	20	40		mA
	I_{sink}	$V_{I(+)}=0V$ $V_{I(-)}=1V$ $V_{CC}=15V$ $V_{O(p)}=2V$	10	13		mA
		$V_{I(+)}=1V$ $V_{I(-)}=0$ $V_{CC}=15V$ $V_{O(p)}=200mV$	12	45		μA
Differential input voltage	$V_{I(diff)}$				V_{CC}	V

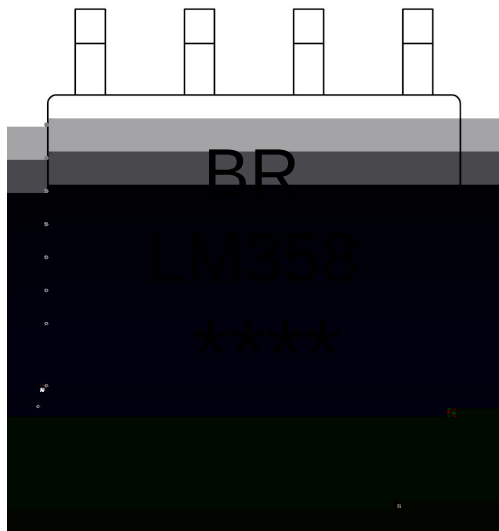




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BR

LM358

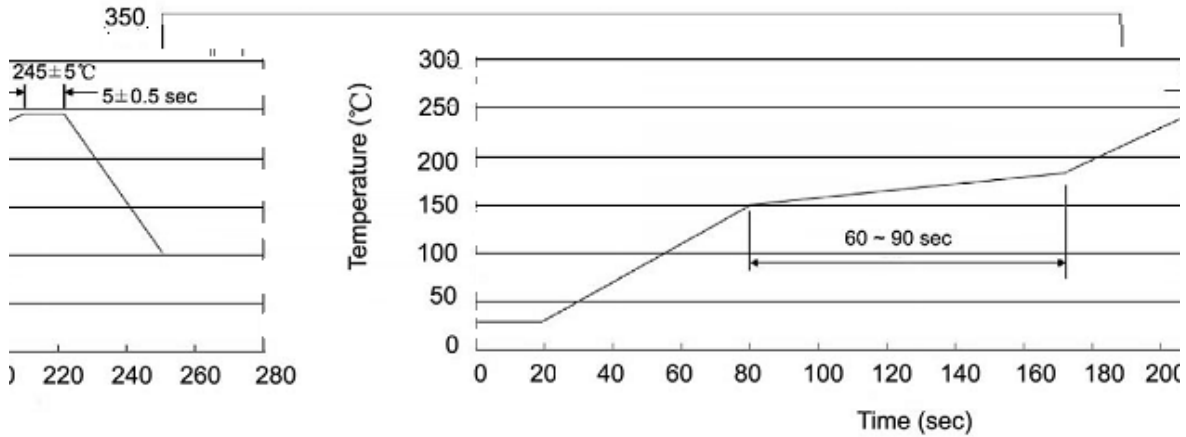
Note:

BR: Company Code.

LM358: Product Type.

****: Lot No. Code, code change with Lot No.

Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

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

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SOP/ESOP-8	4,000	2	8,000	6	48,000	13 ×12	360×360×50	380×335×366