

/ Descriptions

WR0459 ММ Ё QSQ Æ М ы s ll 1 Silicon NPN transistor in a TO-126 Plastic Package.

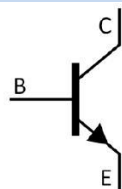
/ Features

Љ 5VE443< Ы ´
Complementary pair with 2SB1109.

/ Applications

Н Ё ∞ я Ѡ з
Low frequency high voltage amplifier.

/ Equivalent Circuit



/ Pinning



PIN1 χ Emitter PIN 2 χ Collector PIN 3 χ Base

/ h_{FE} Classifications & Marking

h _{FE} Classifications Symbol	B	C	D
h _{FE} Range	60 120	100 200	160 320

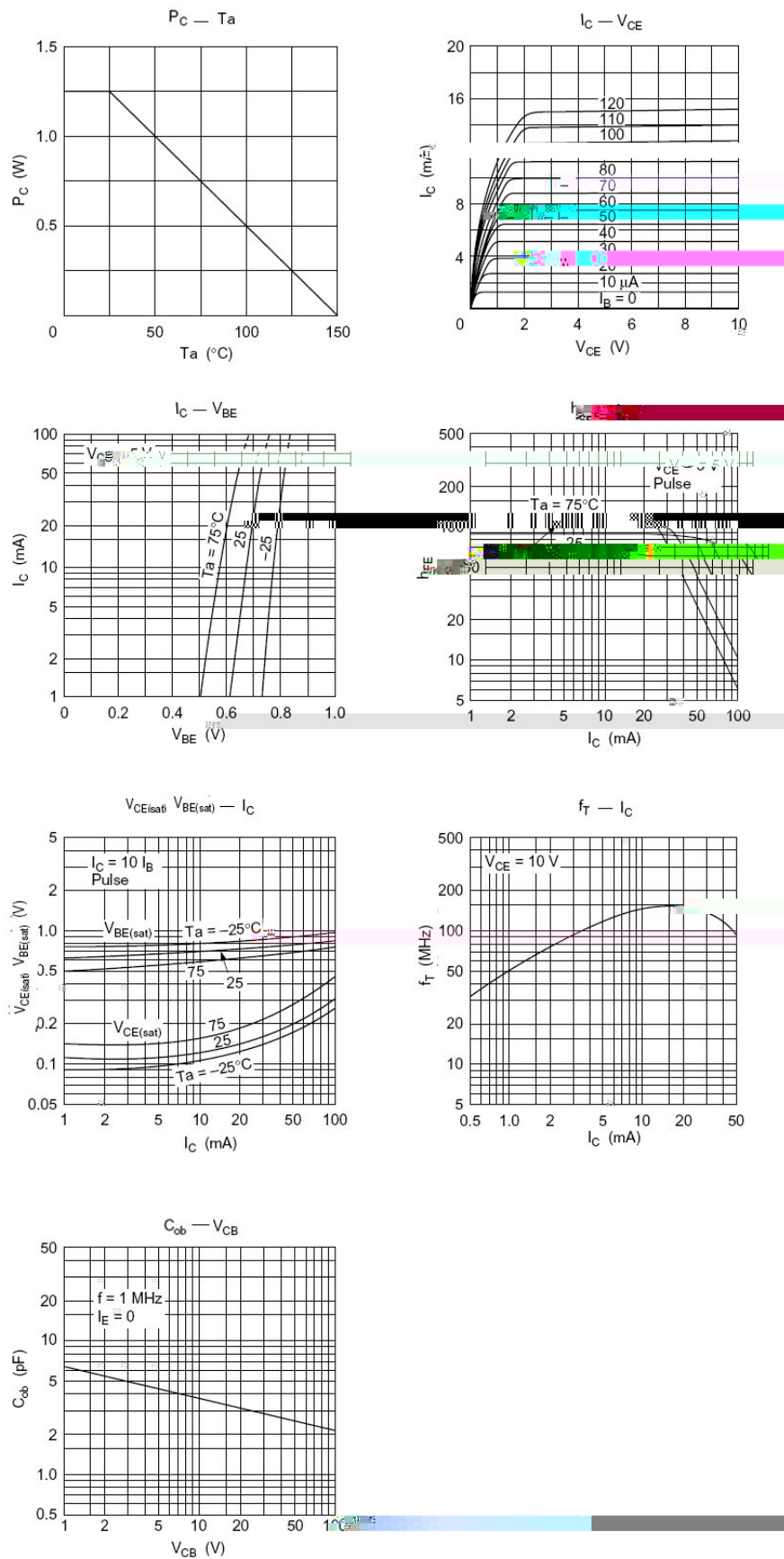
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	160	V
Collector to Emitter Voltage	V_{CEO}	160	V
Emitter to Base Voltage	V_{EBO}	5	V
Collector Current - Continuous	I_C	100	mA
Collector Power Dissipation	P_C	1.25	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=10\mu A$ $I_E=0$	160			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=1mA$ $I_B=\infty$	160			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=10\mu A$ $I_C=0$	5			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=140V$ $I_E=0$			10	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=5V$ $I_C=10mA$	60		320	
	$h_{FE(2)}$	$V_{CE}=5V$ $I_C=1mA$	30			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=30mA$ $I_B=3mA$			2	V
Base to Emitter Voltage	V_{BE}	$V_{CE}=5V$ $I_C=10mA$			1.5	V
Transition Frequency	f_T	$V_{CE}=5V$ $I_C=10mA$		140		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V$ $f=1MHz$ $I_E=0$		3.8		pF

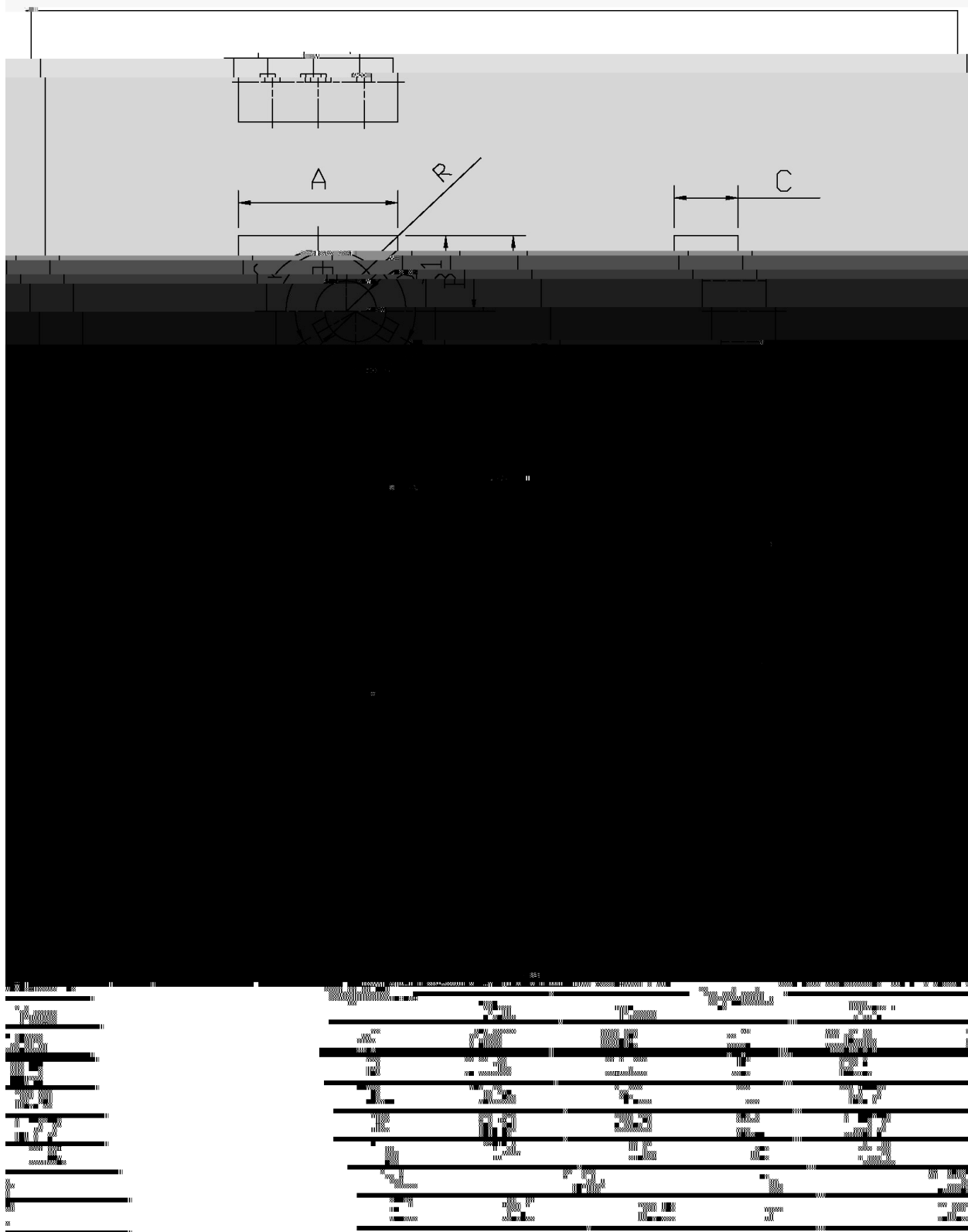
/ Electrical Characteristic Curve



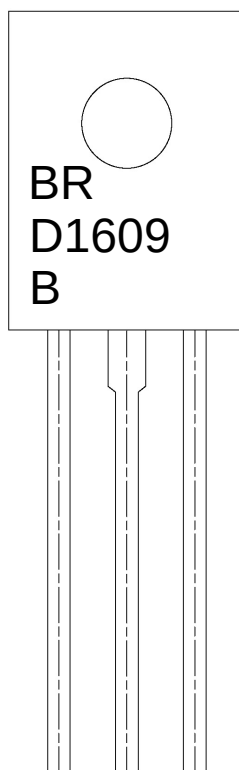
/ Package Dimensions

T□-126

单位: mm



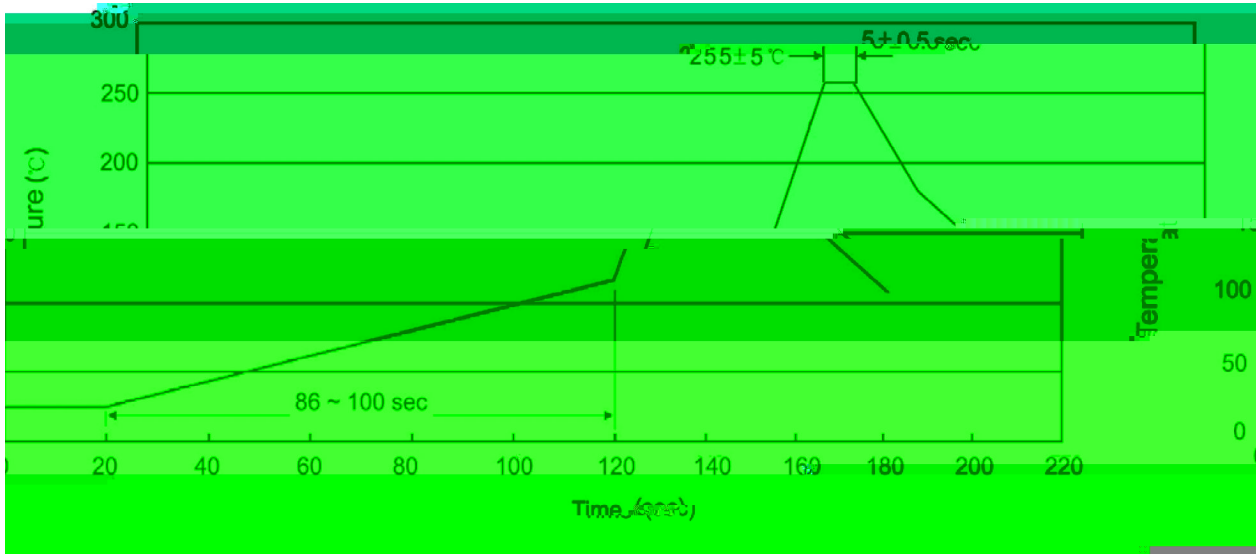
/ Marking Instructions



****.

Lot No. Code, code change with Lot No.

() / Temperature Profile for Dip Soldering(Pb-Free)



说明

1. 预加热: 25~150℃, 时间: 60~90sec;
2. 峰值温度: 255±5℃, 持续时间: 5±0.5sec;
3. 冷却速度: 2~10℃/sec.

Note:

1. Preheating: 25~150℃, Time: 60~90sec.
2. Peak Temp.: 255±5℃, Duration: 5±0.5sec.
3. Cooling Speed: 2~10℃/sec.

/ Resistance to Soldering Heat Test Conditions

温度: 270±5℃ 时间: 10±1 sec. Temp.: 270±5 Time: 10±1 sec

/ Packaging SPEC.

包装形式 / BULK

Package Type Units