

/ Descriptions

TO-126 NPN Silicon NPN transistor in a TO-126 Plastic Package.

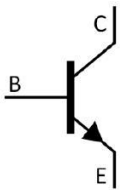
/ Features

$P_C=1.5W$ $T_a=25$
High Power Dissipation : $P_C=1.5W(T_a=25^{\circ}C)$).

/ Applications

Low collector saturation voltage ,large current.

/ Equivalent Circuit



/ Pinning



PIN1 Emitter PIN 2 Collector PIN 3 Base

/ h_{FE} Classifications & Marking

See Marking Instructions.

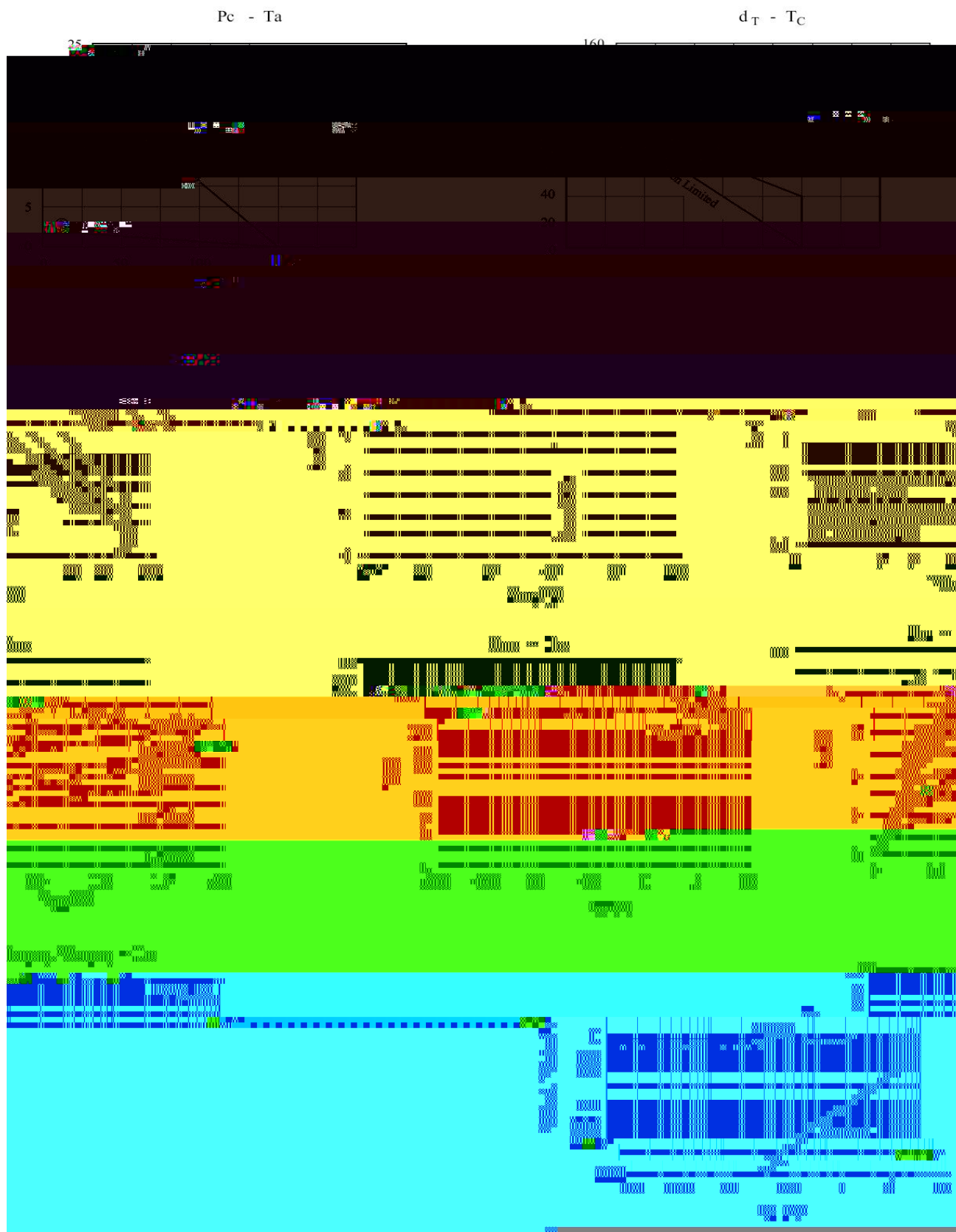
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	60	V
Collector to Emitter Voltage	V_{CEO}	60	V
Emitter to Base Voltage	V_{EBO}	7.0	V
Collector Current - Continuous	I_C	5.0	A
Peak Collector Current	I_{CP}	8.0	A
Base Current - Continuous	I_B	1.0	A
Collector Power Dissipation	P_C	1.5	W
Collector Power Dissipation	$P_C(T_c=25)$	20	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 Cut-off Current	I_{CBO}	$V_{CB}=50V$ $I_E=0$			10	A
Emitter Cut-off Current	I_{EBO}	$V_{EB}=7V$ $I_C=0$			10	A
DC Current Gain	$h_{FE(1)}$	$V_{CE}=1.0V$ $I_C=2.0A$	100		400	
	$h_{FE(2)}$	$V_{CE}=1.0V$ $I_C=0.1A$	60			
	$h_{FE(3)}$	$V_{CE}=2.0V$ $I_C=5.0A$	50			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=2.0A$ $I_B=0.2A$		0.1	0.3	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=2.0A$ $I_B=0.2A$		0.9	1.2	V
Turn On Time	t_{on}	$V_{CC}=10V$ $I_B=0.2A$		0.2	1	s
Fall Time	t_f			1.1	2.5	s
Storage Time	t_s			0.2	1	s

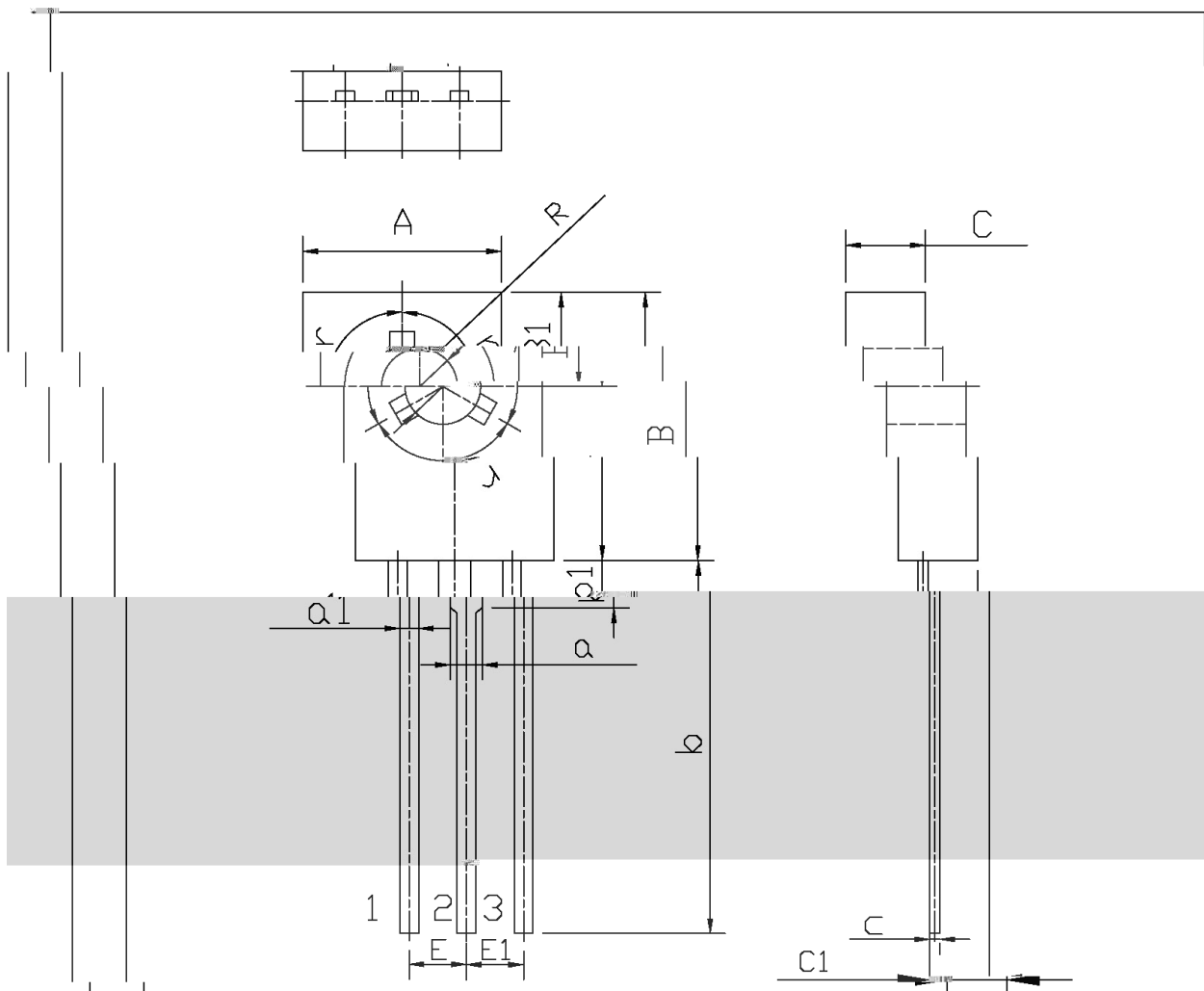
/ Electrical Characteristic Curve



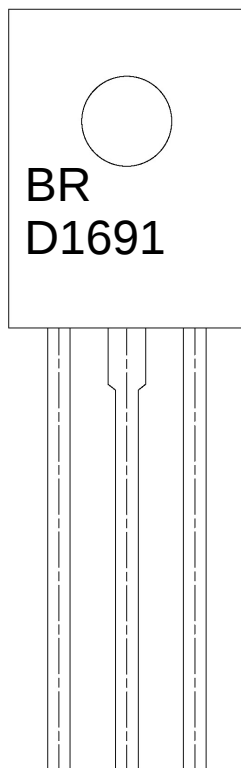
/ Package Dimensions

T□-126

单位: mm



/ Marking Instructions



BR

D1691

Note:

BR: Company Code

D1691: Product Type.

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

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



Note:

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

/ Resistance to Soldering Heat Test Conditions

270±5 10±1 sec. Temp.:270±5 Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	只 套管	套管 盒	只 盒	盒 箱	只 箱	套管	盒	箱

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	只 套管	套管 盒	只 盒	盒 箱	只 箱	套管	盒	箱

/ Notices