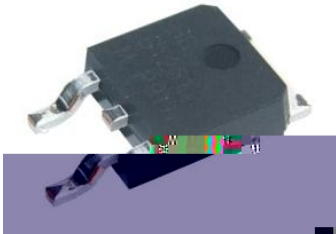
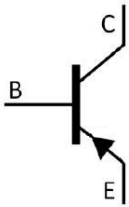


Rev.A May.-2016

TO-252 PNP Silicon PNP transistor in a TO-252 Plastic Package.

2SD669AD
 Complementary pair with 2SD669AD.

Low frequency power amplifier.

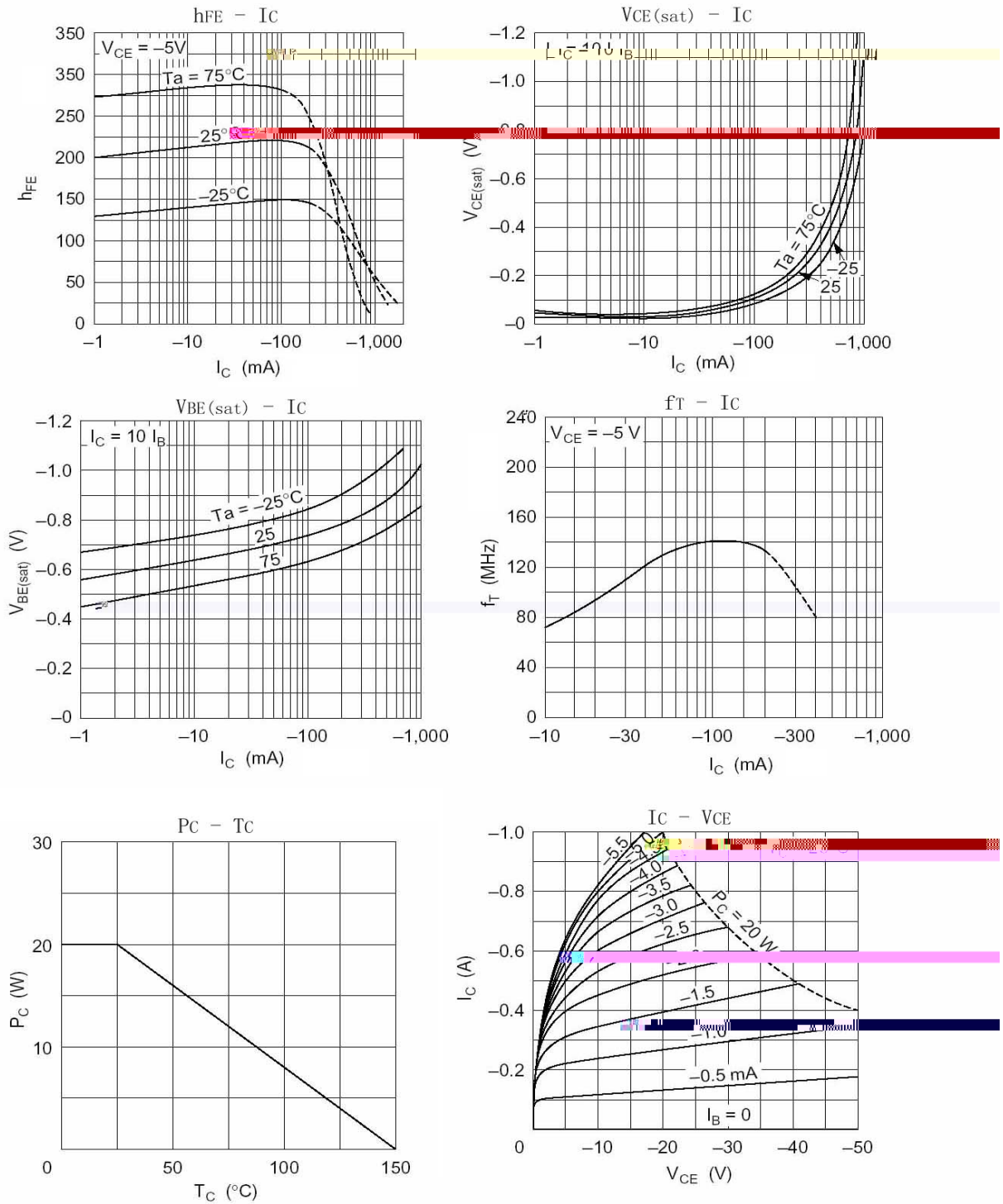


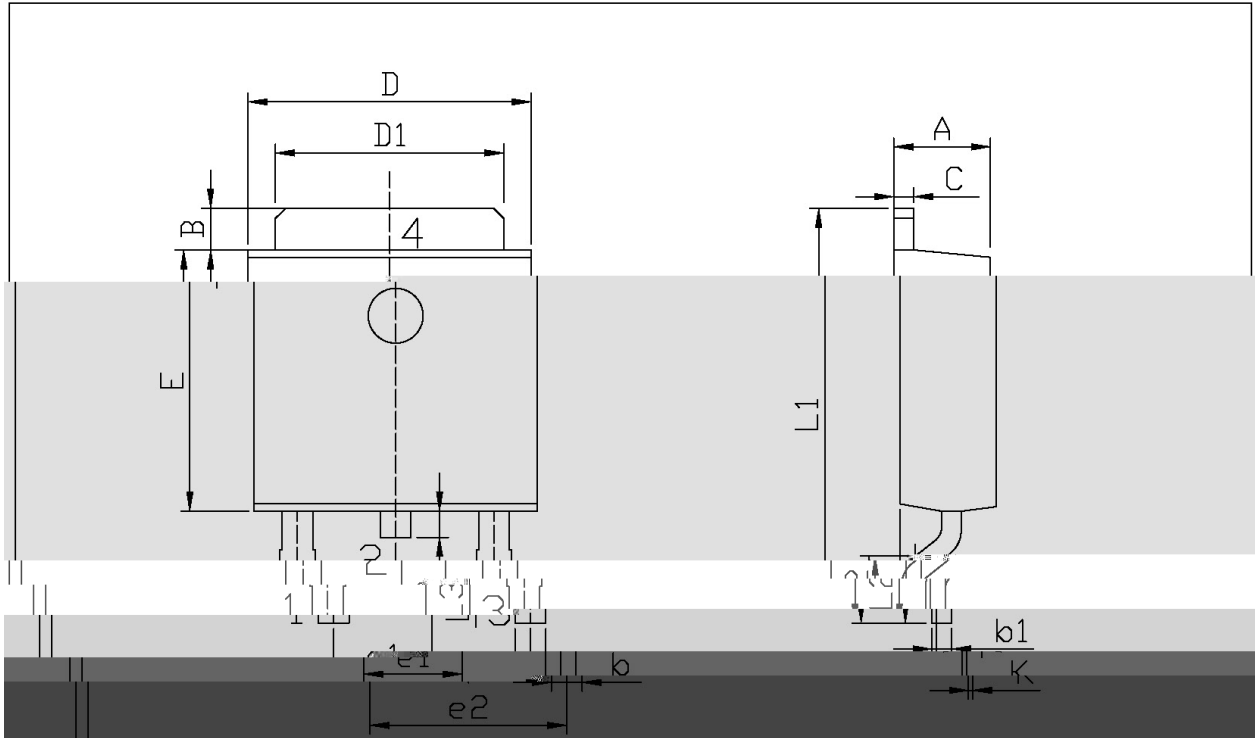
PIN1 Base PIN 2,4 Collector PIN 3 Emitter

h_{FE} Classifications Symbol	B	C	D
h_{FE} Range	60~120	100~200	160~320

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-180	V
Collector to Emitter Voltage	V_{CEO}	-160	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-1.5	A
Peak Collector Current	I_{CP}	-3.0	A
Collector Power Dissipation	P_C	1.0	W
Collector Power Dissipation	$P_C(T_c=25^\circ)$	20	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55~150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=-1.0mA$ $I_E=0$	-180			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=-10mA$ $R_{BE}=\infty$	-160			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=-1.0mA$ $I_C=0$	-5.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-160V$ $I_E=0$			-10	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=-5.0V$ $I_C=-150mA$	60		320	
	$h_{FE(2)}$	$V_{CE}=-5.0V$ $I_C=-500mA$	30			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-500mA$ $I_B=-50mA$			-1.0	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$V_{CE}=-5.0V$ $I_C=-150mA$			-1.5	V
Transition Frequency	f_T	$V_{CE}=-5.0V$ $I_C=-150mA$		140		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=-10V$ $I_E=0$ $f=1.0MHz$		27		pF

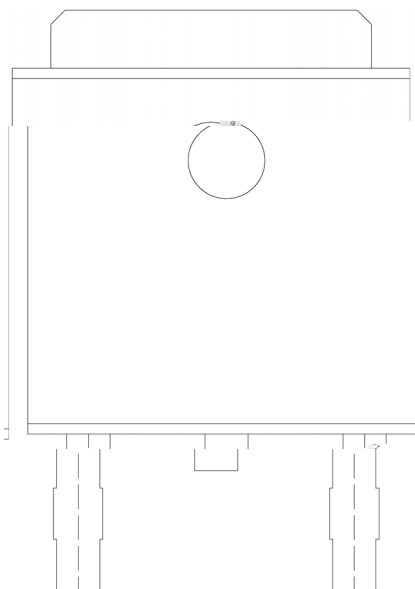




单位: mm

Dimensions In Millimeters			Dimensions In Millimeters		
Symbol	Min	Max	Symbol	Min	Max
A	2.20	2.40	E	5.95	6.25
B	0.95	1.25	e1	2.24	2.3
b	0.50	0.70	e2	4.43	4.7
bL	0.45	0.55	L1	0.45	0.5
C	0.45	0.55	L2	1.25	1.5
D	6.45	6.75	L3	0.60	0.7
D1	5.10	5.50	K	0.00	0.1

TO-252



BR

B649AD

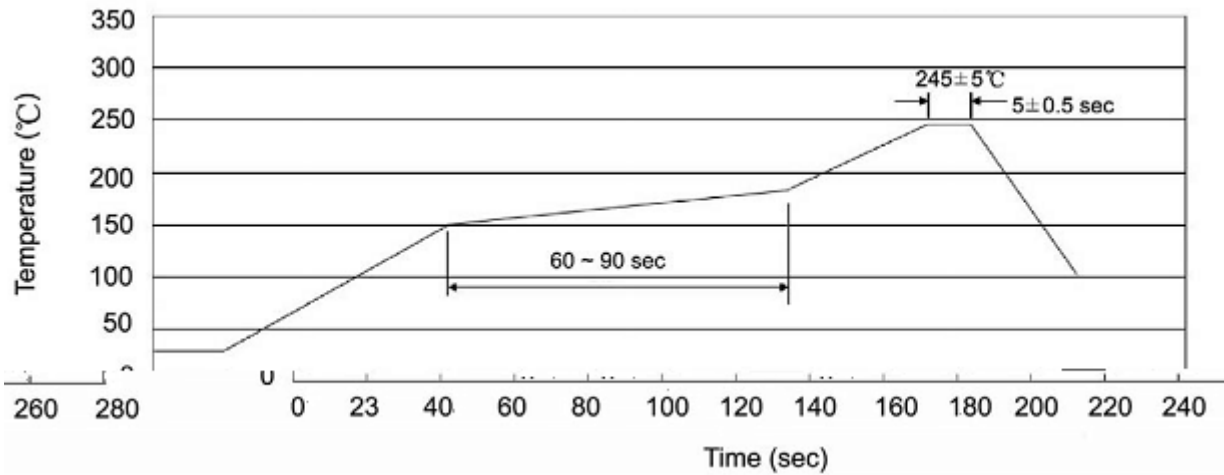
B: h_{FE}

Note:

BR: Company Code

B649AD: Product Type.

B:



Note:

- | | | | | | |
|---|-------|-----|-----------|--------|---|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150 , 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 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	只卷盘	卷盘盒	只盒	盒箱	只箱		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