

2SD1273(A)

Rev.F Mar.-2016

描述 / Descriptions

TO-220F 塑封封装 NPN 半导体三极管。Silicon NPN transistor in a TO-220F Plastic Package.

特征 / Features

h_{FE} 高、线性好。

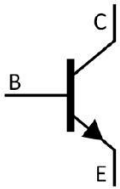
High h_{FE} , good linearity of h_{FE} .

用途 / Applications

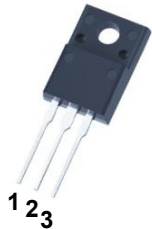
用于高 h_{FE} 的功率放大。

Power amplifier with high forward current transfer ratio applications.

内部等效电路 / Equivalent Circuit



引脚排列 / Pinning



PIN1 : Base

PIN 2 : Collector

PIN 3 : Emitter

放大及印章代码 / h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	Q	P	O
h_{FE} Range	500~1000	800~1500	1200~2500

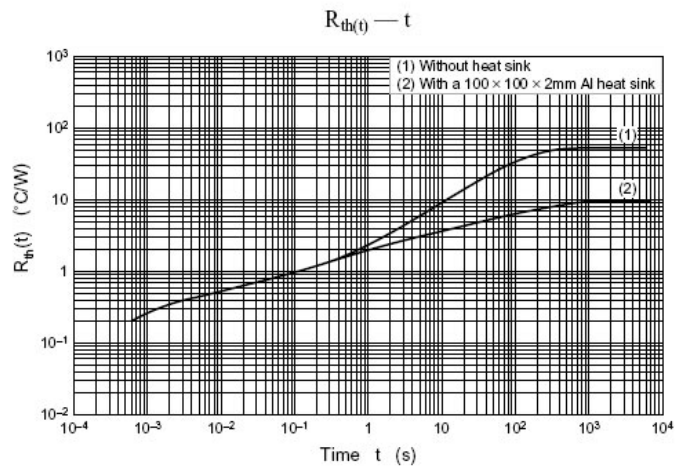
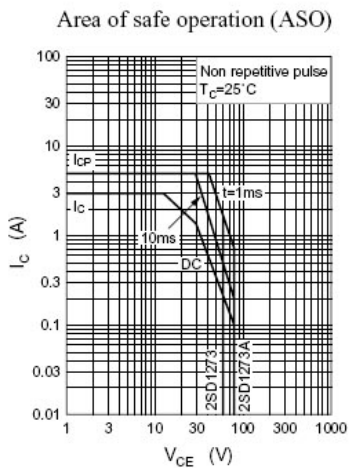
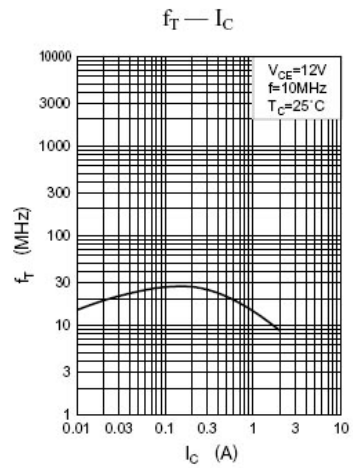
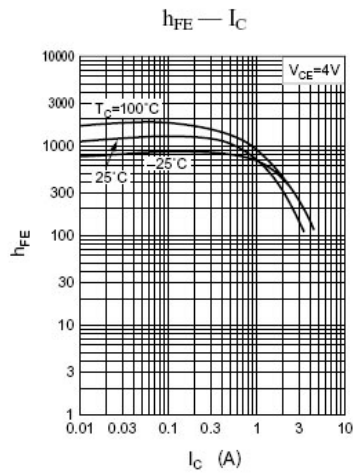
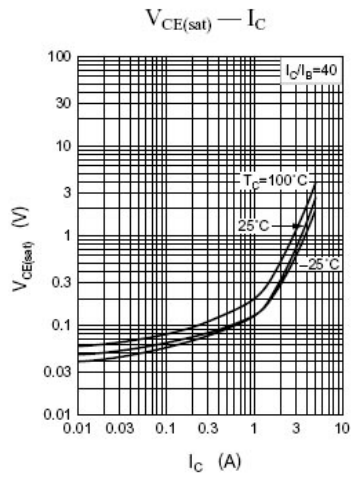
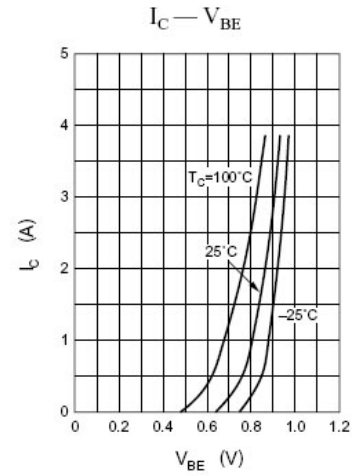
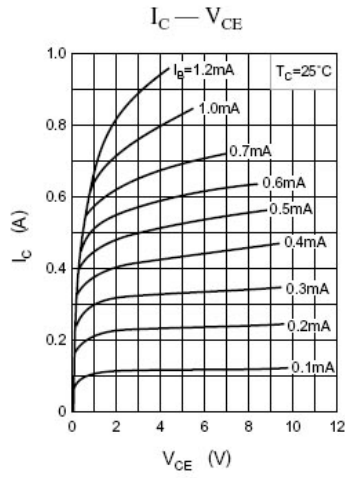
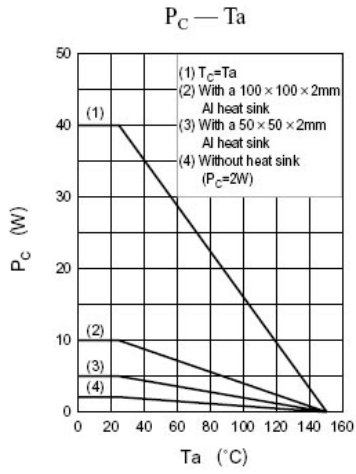
极限参数 / Absolute Maximum Ratings(Ta=25°C)

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit	
Collector to Base Voltage	V _{CBO}	2SD1273	80	V
		2SD1273A	100	
Collector to Emitter Voltage	V _{CEO}	2SD1273	60	V
		2SD1273A	80	
Emitter to Base Voltage	V _{EBO}	6.0	V	
Collector Current - Continuous	I _C	3.0	A	
Collector Current – Continuous(Pulse)	I _{CP}	6.0	A	
Base Current	I _B	1.0	A	
Collector Power Dissipation	P _C	2.0	W	
Collector Power Dissipation	P _C (T _C =25°C)	40	W	
Junction Temperature	T _j	150	°C	
Storage Temperature Range	T _{stg}	-55~150	°C	

电性能参数 / Electrical Characteristics(Ta=25°C)

参数 Parameter	符号 Symbol	测试条件 Test Conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
Collector to Emitter Breakdown Voltage	V _{CEO}	2SD1273	60			V
		2SD1273A	80			
Collector Cut-Off Current	I _{CBO}	2SD1273			100	μA
Collector Cut-Off Current		2SD1273A			100	μA
Collector Cut-Off Current	I _{CEO}	V _{CE} =40V I _B =0			100	μA
Emitter Cut-Off Current	I _{EBO}	V _{EB} =6.0V I _C =0			100	μA
DC Current Gain	h _{FE}	V _{CE} =4.0V I _C =0.5A	500		2500	
Collector to Emitter Saturation Voltage	V _{CE(sat)}	I _C =2.0A I _B =50mA			1.0	V
Transition Frequency	f _T	V _{CE} =12V f=10MHz I _C =0.2A		50		MHz

电参数曲线图 / Electrical Characteristic Curve



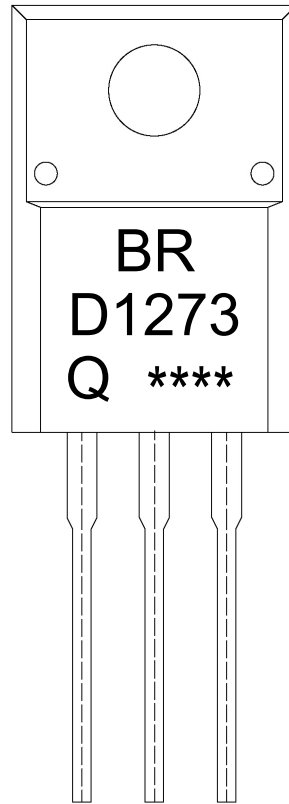
外形尺寸图 / Package Dimensions

TO-220F

单位: mm



印章说明 / Marking Instructions



说明：

BR： 为公司代码

D1273： 为型号代码

Q： 为 h_{FE} 分档代码

****： 为生产批号代码，随生产批号变化。

Note:

BR: Company Code.

D1273: Product Type.

Q: h_{FE} Classifications Symbol

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

波峰焊温度曲线图(无铅) / Temperature Profile for Dip Soldering(Pb-Free)



说明：

- 1、预热温度 25 ~ 150°C，时间 60 ~ 90sec；
- 2、峰值温度 255±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:25~150°C, Time:60~90sec.
- 2.Peak Temp.:255±5°C, Duration:5±0.5sec.
3. Cooling Speed: 2~10°C/sec.

耐焊接热试验条件 / Resistance to Soldering Heat Test Conditions

温度：270±5°C

时间：10±1 sec.

Temp.:270±5°C

Time:10±1 sec

包装规格 / Packaging SPEC.

散件包装 / BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Bag 只/袋	Bags/Inner Box 袋/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Bag 袋	Inner Box 盒	Outer Box 箱
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

套管包装 / TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Tube 只/套管	Tubes/Inner Box 套管/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Tube 套管	Inner Box 盒	Outer Box 箱
TO-220/F	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180

使用说明 / Notices