/ Descriptions

TO-220F PNP Silicon PNP transistor in a TO-220F Plastic Package.

/ Features

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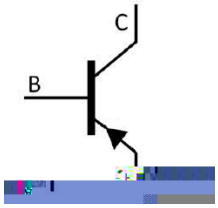
Low $V_{CE(sat)}$, excellent DC current gain characteristics, wide SOA.

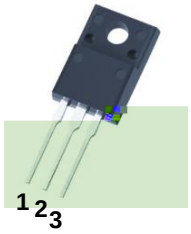
/ Applications

Audio frequency power amplifier applications.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	E	F
h_{FE} Range	100 200	160 320

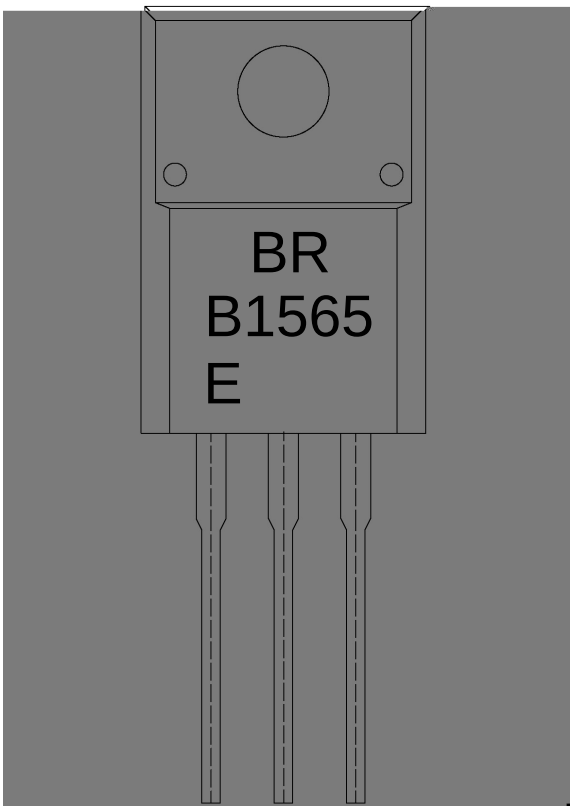
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-80	V
Collector to Emitter Voltage	V_{CEO}	-60	V
Emitter to Base Voltage	V_{EBO}	-7.0	V
Collector Current - Continuous	$I_{C(DC)}$	-3.0	A
Collector Current – Continuous(Pulse)	$I_{C(pulse)}$	-6.0	A
Collector Power Dissipation	P_C	2.0	W
Collector Power Dissipation	P_C (Tc=25)	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=-50μA	-80			V
Collector to Base Breakdown Voltage	V_{CEO}	I_C=-1.0mA	-60			V
Emitter to Base Breakdown Voltage	V_{EBO}	I_E=-50μA	-7.0			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=-60V			-10	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=-7.0V			-10	μA
DC Current Gain	h_{FE}	V_{CE}=-5.0V I_C=-500mA	100		320	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-2.0A I_B=-200mA			-1.5	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=-2.0A I_B=-200mA			-1.5	V
Transition Frequency	f_T	V_{CE}=-5.0V I_E=0.5A f=5.0MHz		15		MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V I_E=0 f=1.0MHz		50		pF

/ Marking Instructions



BR

B1565

E: h_{FE}

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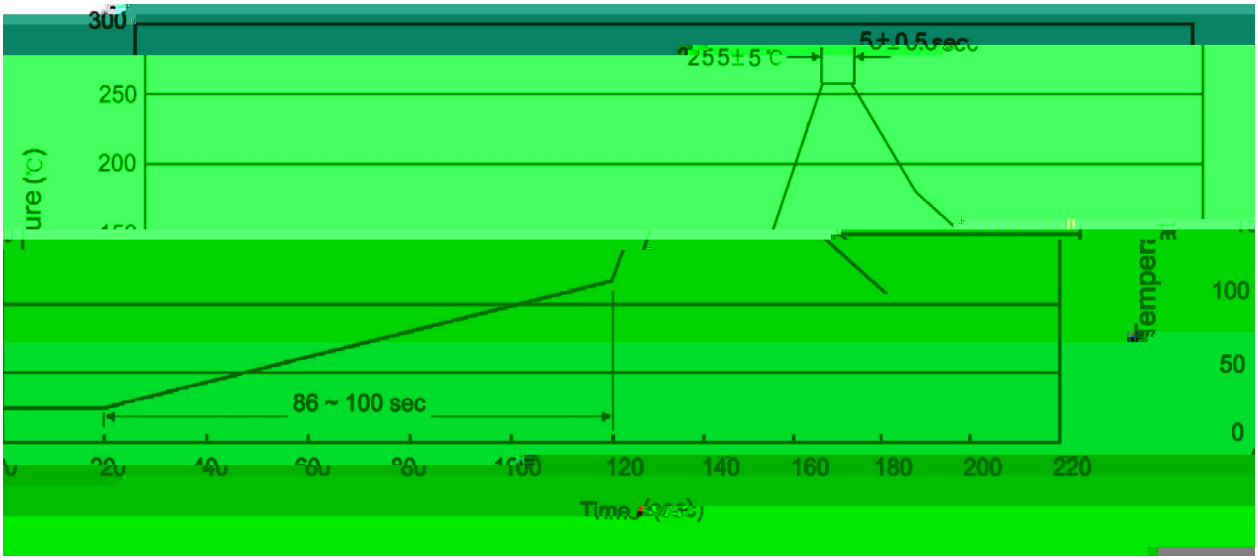
Note:

BR:	Company Code.
B1565:	Product Type.
E:	h_{FE} Classifications Symbol
****:	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	Units					Dimension		(unit mm^3)

/ TUBE

Package Type	Units					Dimension		(unit mm^3)

/ Notices