2SA1757

Rev.E Mar.-2016

蓝箭电子 BLUE ROCKET ELECTRONICS

DATA SHEET

/ Descriptions

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

/ Features

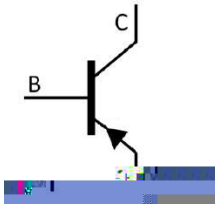
, , , , 2SC4596

Low $V_{CE(sat)}$,excellent DC current gain characteristics, wide SOA, fast speed switching, complements the 2SC4596.

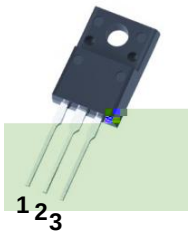
/ Applications

High speed switching applications.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

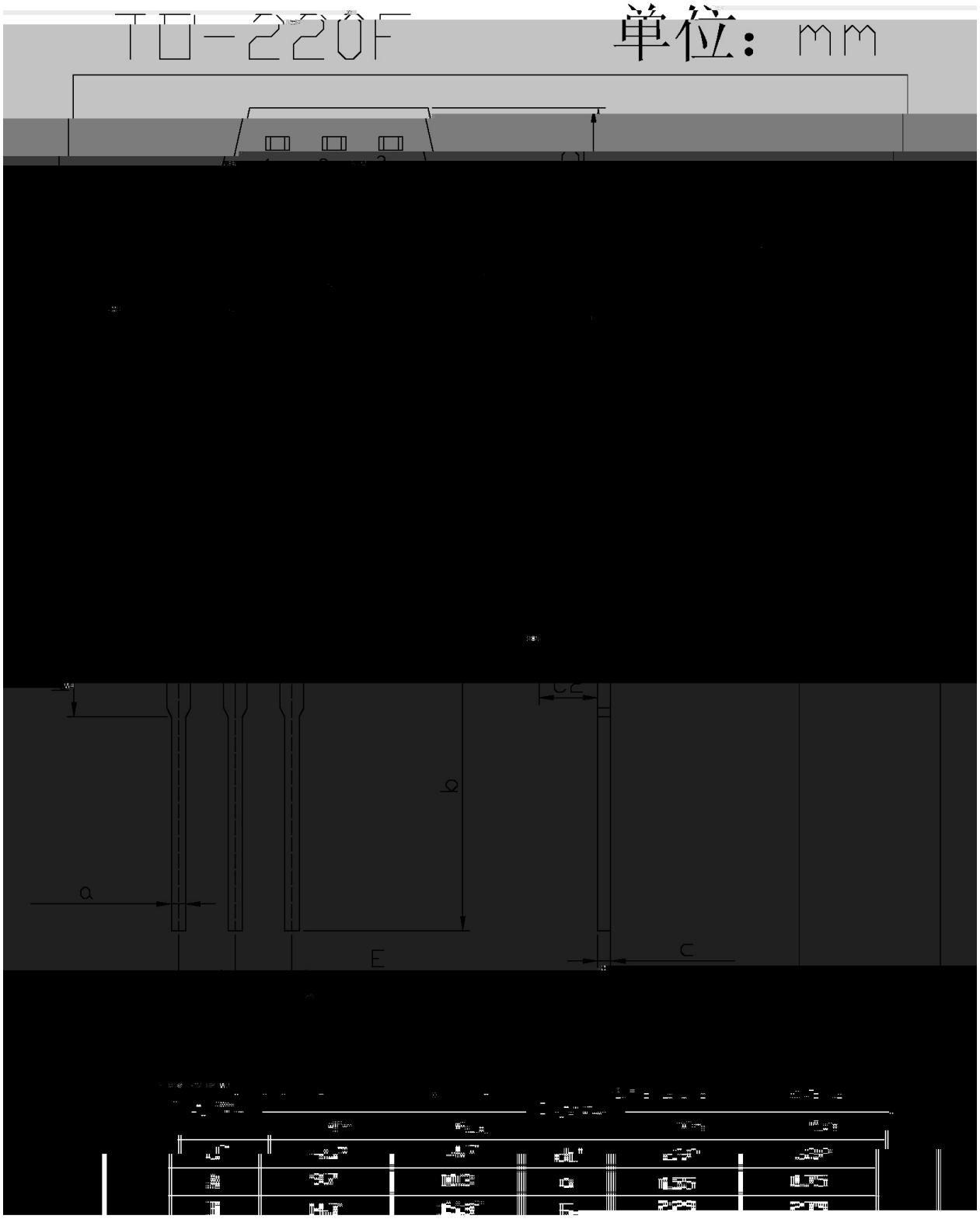
h_{FE} Classifications Symbol	D	E	F
h_{FE} Range	60 120	100 200	160 320

/ Absolute Maximum Ratings(Ta=25)

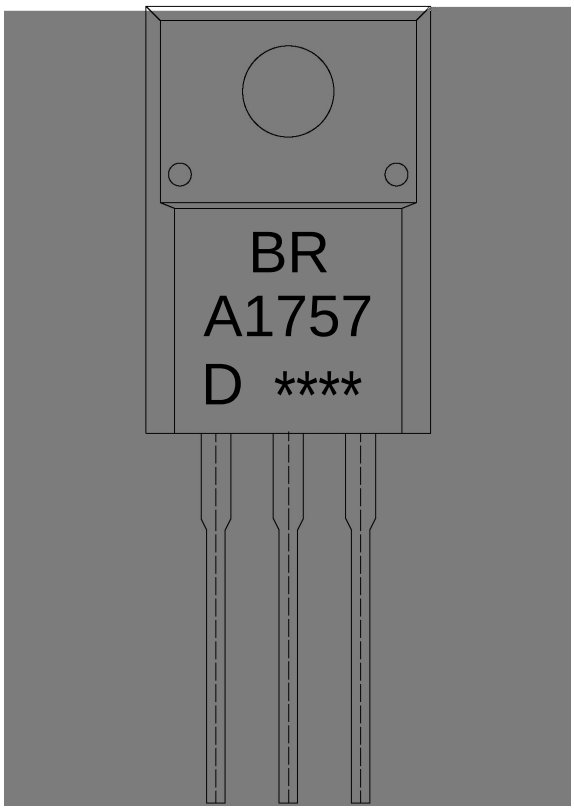
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-100	V
Collector to Emitter Voltage	V_{CEO}	-60	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-5.0	A
Collector Current – Continuous(Pulse)	I_{CP}	-10	A
Collector Power Dissipation	P_C	2.0	W
Collector Power Dissipation	$P_C(T_C=25$)	25	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=-50μA I_E=0	-100			V
Collector to Base Breakdown Voltage	V_{CEO}	I_C=-1.0mA I_B=0	-60			V
Emitter to Base Breakdown Voltage	V_{EBO}	I_E=-50μA I_C=0	-5.0			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=-100V I_E=0			-10	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=-5.0V I_C=0			-10	μA
DC Current Gain	h_{FE}	V_{CE}=-2.0V I_C=-1.0A	60		320	
Collector to Emitter Saturation Voltage	$V_{CE(sat)(1)}$	I_C=-3.0A I_B=-0.15A			-0.3	V
	$V_{CE(sat)(2)}$	I_C=-4.0A I_B=-0.2A			-0.5	V
Base to Emitter Saturation Voltage	$V_{BE(sat)(1)}$	I_C=-3.0A I_B=-0.15A			-1.2	V
	$V_{BE(sat)(2)}$	I_C=-4.0A I_B=-0.2A			-1.5	V
Transition Frequency	f_T	V_{CE}=-10V I_E=0.5A f=30MHz		80		MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V I_E=0A f=1.0MHz		130		pF
Turn-On Time	t_{on}	V_{CC}=-30V I_C=-3A R_L=10Ω I_{B1}=-I_{B2}=-0.15A			0.3	μs
Fall Time	t_f				0.3	μs
Storage Time	t_{stg}				1.5	μs

/ Package Dimensions



/ Marking Instructions



BR

A1757

D: h_{FE}

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Note:

BR:	Company Code.
A1757:	Product Type.
D:	h_{FE} Classifications Symbol
****:	Lot No. Code, code change with Lot No.