

Pb Free Plating Product

2SC4793



20 Watt Silicon Epitaxial Planar Process NPN Power Transistor

DESCRIPTION

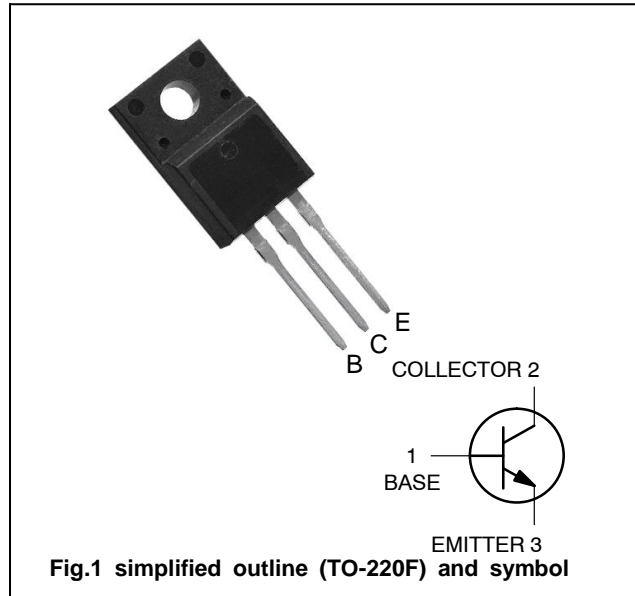
- With TO-220F package outline
- Complement to type 2SA1837

APPLICATIONS

- Power amplifier applications
- Recommended for Driver Stage Amplifier Applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector; connected to mounting base
3	Emitter



ABSOLUTE MAXIMUM RATINGS (T_A=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V _{CB0}	230	V
Collector-Emitter Voltage	V _{CEO}	230	V
Emitter-Base Voltage	V _{EBO}	5	V
Collector Current	I _C	1	A
Base Current	I _B	0.1	A
Collector Power Dissipation	P _C	T _A =25°C	2.0
		T _C =25°C	20
Junction Temperature	T _J	+150	°C
Storage Temperature Range	T _{STG}	-55 ~ +150	°C

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

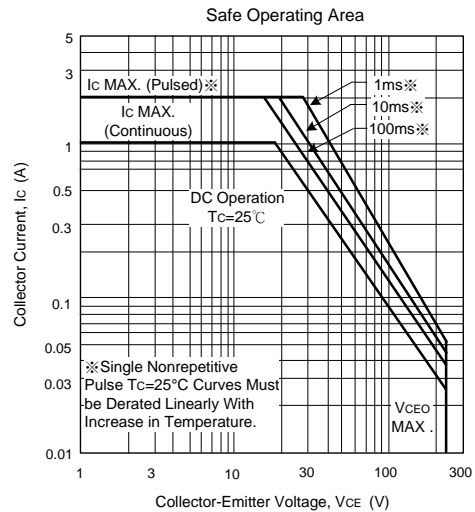
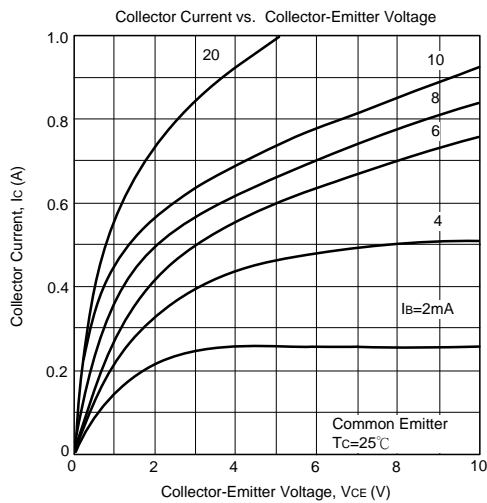
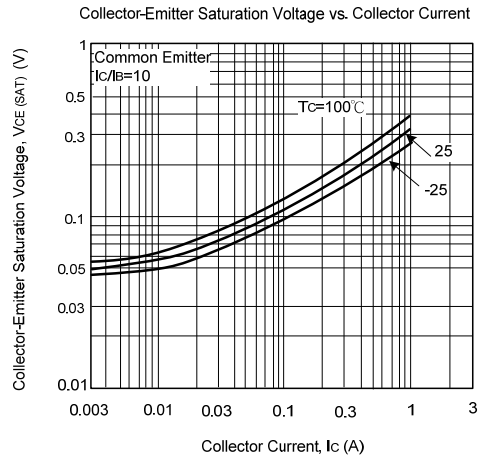
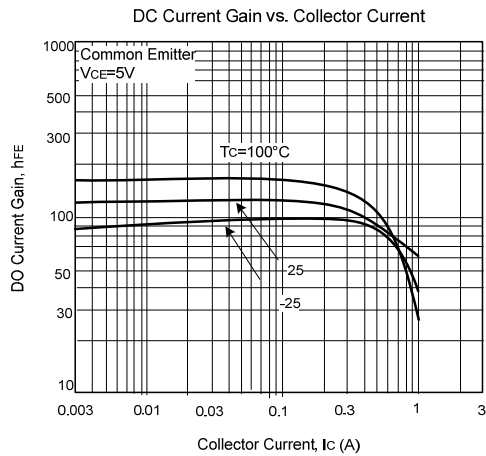
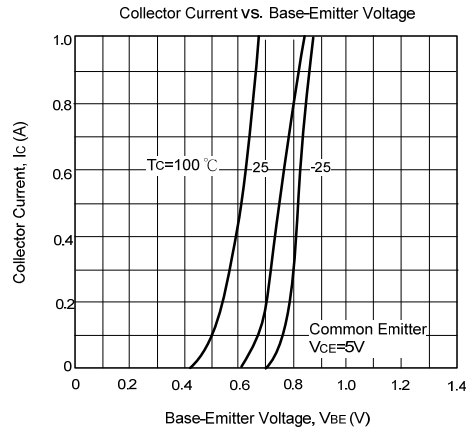
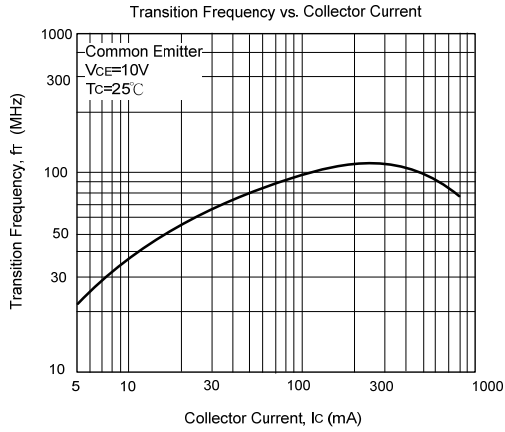
ELECTRICAL CHARACTERISTICS (T_a=25°C, unless others specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Breakdown Voltage	BV _{CEO}	I _C =10mA, I _B =0	230			V
Base -Emitter Voltage	V _{BE}	V _{CE} =5V, I _C =500mA			1.0	V
Collector-Emitter Saturation Voltage	V _{CE(SAT)}	I _C =500mA, I _B =50mA			1.5	V
Collector Cut-off Current	I _{CB0}	V _{CB} =230V, I _E =0			1.0	μA
Emitter Cut-off Current	I _{EBO}	V _{EB} =5V, I _C =0			1.0	μA
DC Current Gain	h _{FE}	V _{CE} =5V, I _C =100mA	100		320	
Transition Frequency	f _T	V _{CE} =10V, I _C =100mA		100		MHz
Collector Output Capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz		20		pF

CLASSIFICATION OF h_{FE}

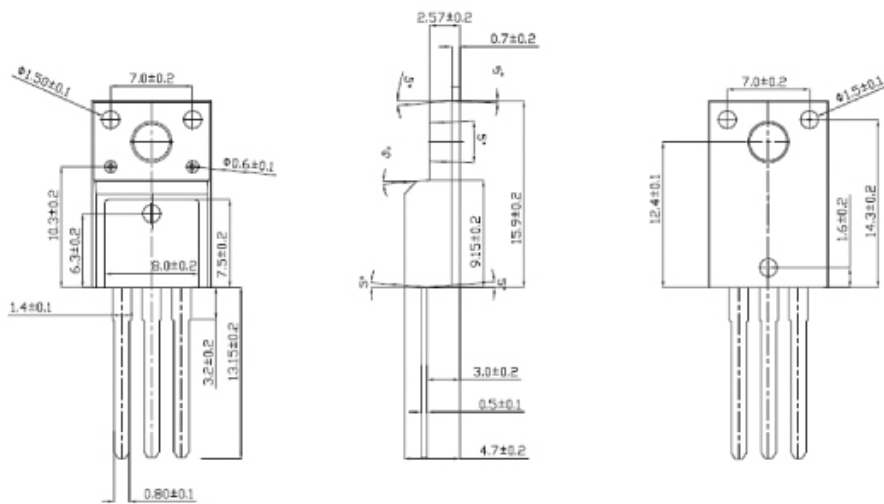
RANK	A	B
RANGE	100-200	180-320

TYPICAL CHARACTERISTICS



Mechanical Dimensions

TO-220F(ITO-220AB)



Dimensions in Millimeters