

Pb Free Plating Product

2SC4793



20 Watt Silicon Epitaxial Planar Process NPN Power Transistor

DESCRIPTION

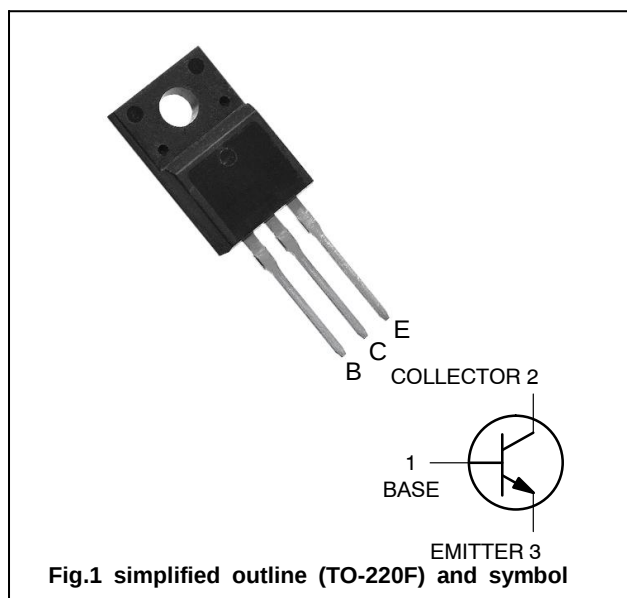
- With TO-220F package outline
- Complement to type 2SA1837

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 ($T_A=25^\circ\text{C}$)

PARAMETER		SYMBOL	RATINGS	UNIT
Collector-Base Voltage		V_{CBO}	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	$T_A=25^{\circ}\text{C}$	P_C	2.0	W
	$T_C=25^{\circ}\text{C}$		20	W
Junction Temperature		T_J	+150	$^{\circ}\text{C}$
Storage Temperature Range		T_{STG}	-55 ~ +150	$^{\circ}\text{C}$

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.

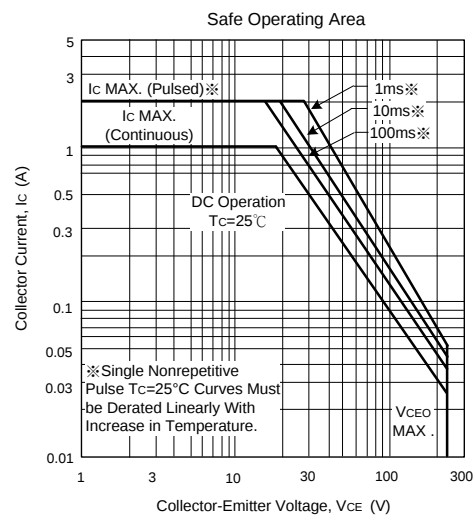
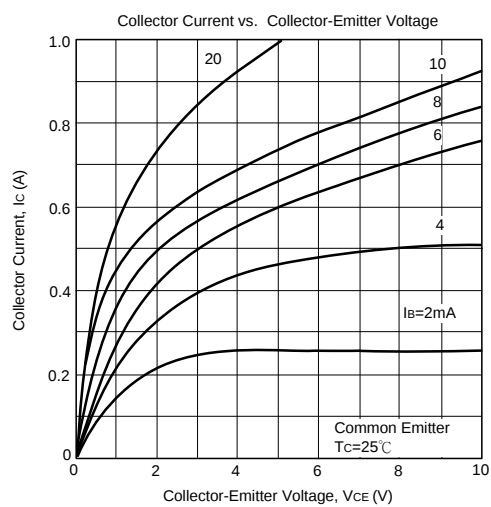
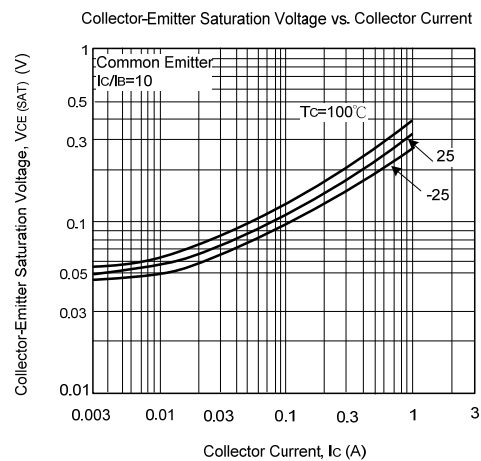
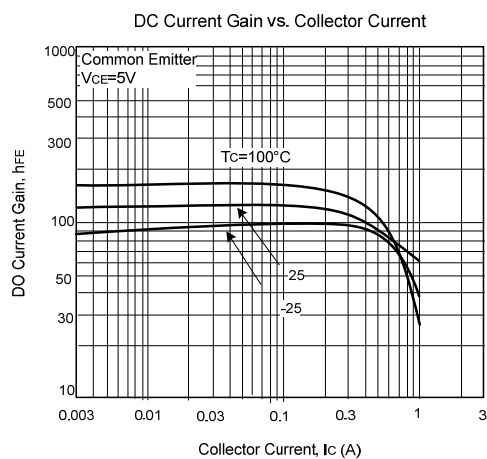
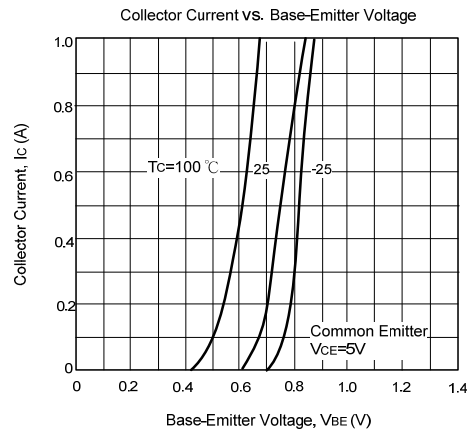
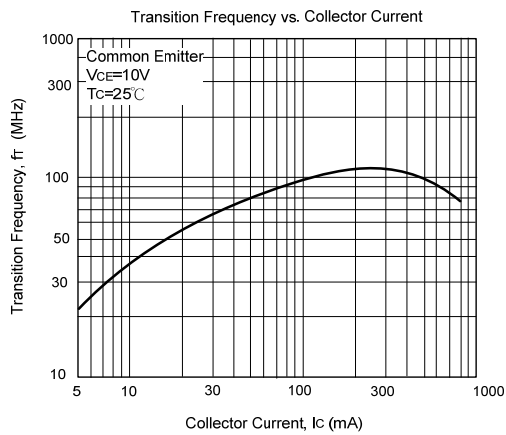
ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$, unless others specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C=10\text{mA}$, $I_B=0$	230			V
Base -Emitter Voltage	V_{BE}	$V_{CE}=5\text{V}$, $I_C=500\text{mA}$			1.0	V
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C=500\text{mA}$, $I_B=50\text{mA}$			1.5	V
Collector Cut-off Current	I_{CBO}	$V_{CB}=230\text{V}$, $I_E=0$			1.0	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5\text{V}$, $I_C=0$			1.0	μA
DC Current Gain	h_{FE}	$V_{CE}=5\text{V}$, $I_C=100\text{mA}$	100		320	
Transition Frequency	f_T	$V_{CE}=10\text{V}$, $I_C=100\text{mA}$		100		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10\text{V}$, $I_E=0$, $f=1\text{MHz}$		20		pF

CLASSIFICATION OF h_{FE}

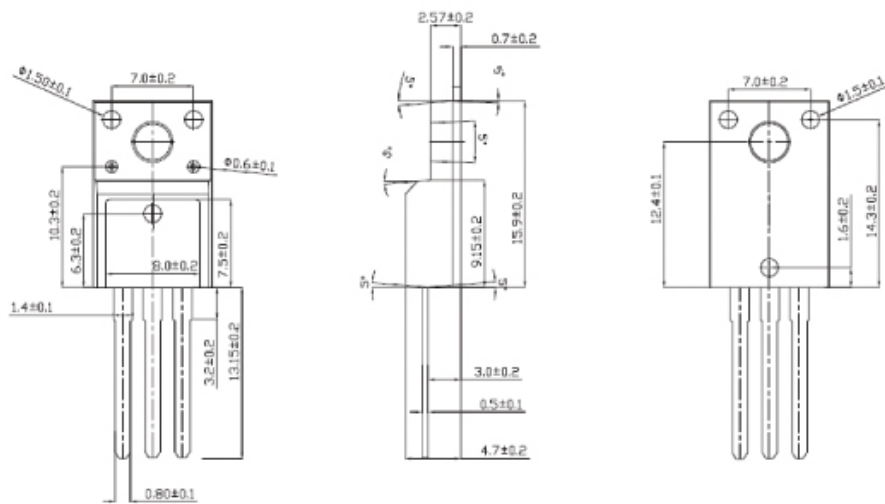
RANK	A	B
RANGE	100-200	180-320

TYPICAL CHARACTERISTICS



Mechanical Dimensions

TO-220F(ITO-220AB)



Dimensions in Millimeters