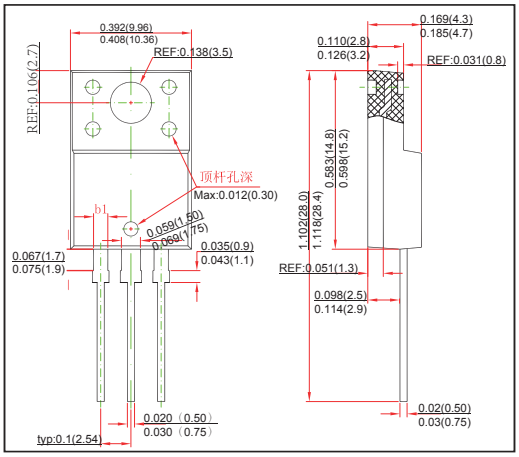
TO-220F Plastic-Encapsulate Transistors

FEATURES

- High Forward CurrentTransferRatio hFE which
- Has Satisfactory Linearity
- Low Collector to Emitter Saturation Voltage VcE(sat)
- Allowing Supply with the Radial Taping
- TRANSISTOR (NPN)

MECHANICAL DATA

- Case style:TO-220F molded plastic
- Mounting position:any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	60	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current -Continuous	I_C	3	A
Collector Power Dissipation	P_C	2	W
Junction Temperature	T_J	150	℃
Storage Temperature	T_{stg}	-55 ~ +150	℃

Parameter		Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage		$V_{(BR)CBO}$	I_C=0.1mA, I_E=0	60			V
Collector-emitter breakdown voltage		$V_{(BR)CEO}$	I_C=30mA, I_B=0	60			V
Emitter-base breakdown voltage		$V_{(BR)EBO}$	I_E=0.1mA, I_C=0	6			V
Collector cut-off current		I_{CBO}	V_{CB}=60V, I_E=0			100	μA
Collector cut-off current		I_{CEO}	V_{CE}=30V, I_B=0			100	μA
Emitter cut-off current		I_{EBO}	V_{EB}=6V, I_C=0			100	μA
DC current gain		$h_{FE(1)}$	V_{CE}=4V, I_C=1A	70		320	
		$h_{FE(2)}$	V_{CE}=4V, I_C=3A	10			
Collector-emitter saturation voltage		$V_{CE(sat)}$	I_C=3A, I_B=375mA			1.2	V
Base-emitter voltage		V_{BE}	V_{CE}=4V, I_C=3A			1.8	V
Transition frequency		f_T	V_{CE}=5V, I_C=0.2A, f=10MHz		30		MHz
Switch time	Turn-on time	t_{on}	V_{CC}=50V,I_C=1A, I_B1=-I_B2=0.1A		0.3		μs
	Storage time	t_{stg}			2.5		μs
	Fall time	t_f			0.2		μs