

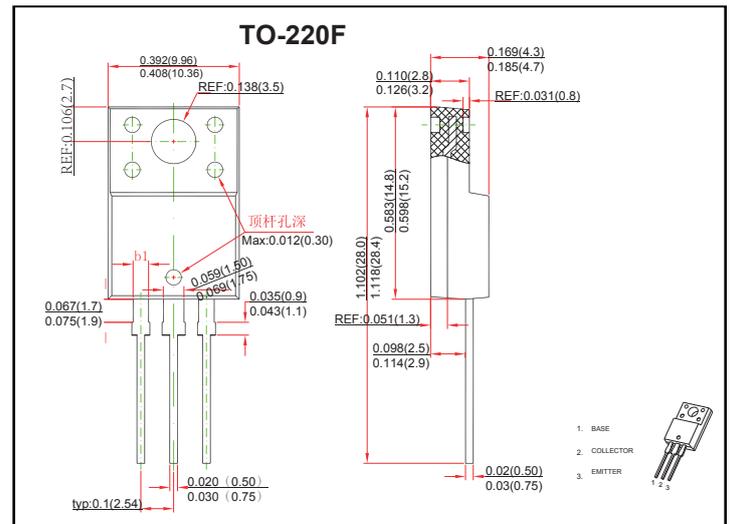
TO-220F Plastic-Encapsulate Transistors

FEATURES

- Low $V_{CE(sat)}$: $V_{CE(sat)} = -1.0V(\text{Max.})(I_C/I_B = -2A/-0.2A)$
- Complementary to KTD2058
- TRANSISTOR (PNP)

MECHANICAL DATA

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



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Symbol	Parameter	Value	Unit
VCBO	Collector-Base Voltage	-60	V
VCEO	Collector-Emitter Voltage	-60	V
VEBO	Emitter-Base Voltage	-7	V
IC	Collector Current -Continuous	-3	A
PC	Collector power dissipation	2	W
TJ	Junction temperature	150	°C
Tstg	Storage Temperature	-55~+150	°C

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -1\text{mA}, I_E = 0$	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -50\text{mA}, I_B = 0$	-60			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -1\text{mA}, I_C = 0$	-7			V
Collector cut-off current	I_{CBO}	$V_{CB} = -60\text{V}, I_E = 0$			-100	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -7\text{V}, I_C = 0$			-100	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = -5\text{V}, I_C = -0.5\text{A}$	60		200	
	$h_{FE(2)}$	$V_{CE} = -5\text{V}, I_C = -3\text{A}$	20			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -2\text{A}, I_B = -0.2\text{A}$			-1	V
Base-emitter voltage	V_{BE}	$V_{CE} = -5\text{V}, I_C = -0.5\text{A}$			-1	V
Transition frequency	f_T	$V_{CE} = -5\text{V}, I_C = -0.5\text{A}$		9		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$		150		pF
Fall time	t_f	$I_C = -2\text{A}, I_{B1} = -I_{B2} = -0.2\text{A}$		0.4		μs
Storage time	t_s	$V_{CC} = -30\text{V}$		1.7		μs

CLASSIFICATION of $h_{FE(1)}$

Rank	O	Y
Range	60-120	100-200