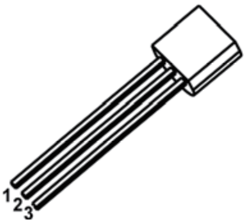
FTC2878 TRANSISTOR (NPN)

TO- 92

1. EMITTER
2. COLLECTOR
3. BASE



FEATURES

- High Emitter- Base Voltage
- Low on Resistance

MAXIMUM RATINGS (Ta=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	50	V
V_{CEO}	Collector-Emitter Voltage	20	V
V_{EBO}	Emitter-Base Voltage	15	V
I_C	Collector Current -Continuous	0.3	A
P_C	Collector Power Dissipation	0.4	W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55-150	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	$V_{(BR)CBO}$	I_C=10μA,I_E=0	50			V
Collector- emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA,I_B=0	20			V
Emitter- base breakdown voltage	$V_{(BR)EBO}$	I_E=10μA,I_C=0	15			V
Collector cut- off current	I_{CBO}	V_{CB}=50V,I_E=0			0.1	μA
Emitter cut- off current	I_{EBO}	V_{EB}=15V,I_C=0			0.1	μA
DC current gain	h_{FE}	V_{CE}=2V,I_C=4mA	200		1200	
Collector- emitter saturation voltage	$V_{CE(sat)}$	I_C=30mA,I_B=3mA			0.3	V
Base- emitter voltage	$V_{BE(on)}$	V_{CE}=2V,I_C=4mA			0.71	V
Transition frequency	f_T	V_{CE}=6V,I_C=4mA		30		MHz
Collector output capacitance	C_{ob}	V_{CB}=10V,I_E=0,f=1MHz			7	pF
Turn- on time	t_{on}	V_{CC}=12V,I_C=12mA,I_B=1.2mA			160	nS
Storage time	t_S				500	nS
Fall time	t_f				130	nS

CLASSIFIC ATION OF h_{FE}

Rank	A	B
Range	200-700	350-1200

● Electrical characteristic curves