

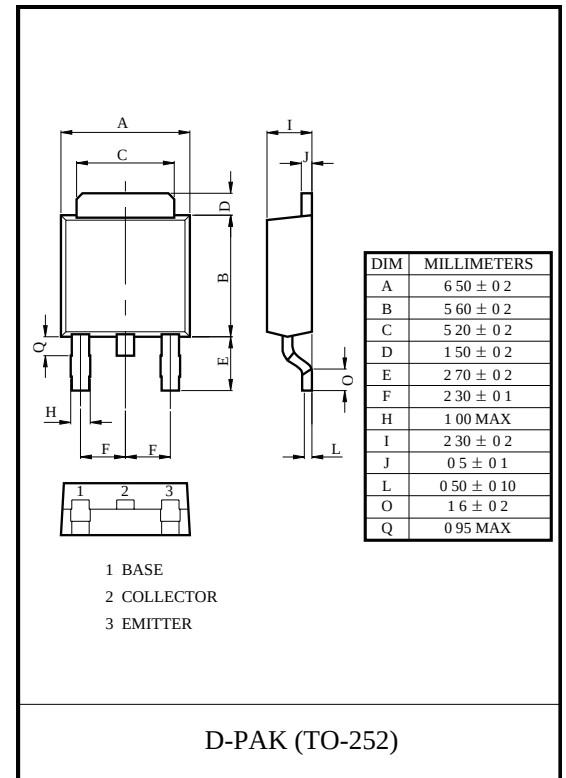
FTD2118 TRANSISTOR (NPN)

FEATURES

- Low $V_{CE(sat)}$
- Excellent DC Current Gain Characteristics.

MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector- Base Voltage	50	V
V_{CEO}	Collector- Emitter Voltage	20	V
V_{EBO}	Emitter- Base Voltage	6	V
I_C	Collector Current - Continuous	5	A
P_C	Collector Power Dissipation	1	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	- 55- 150	$^\circ\text{C}$



ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	$V_{(BR)CBO}$	$I_C=50\mu\text{A}, I_E=0$				V
Collector- emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, I_B=0$				V
Emitter- base breakdown voltage	$V_{(BR)EBO}$	$I_E=50\mu\text{A}, I_C=0$				V
Collector cut- off current	I_{CBO}	$V_{CB}=40\text{V}, I_E=0$			0.5	μA
Emitter cut- off current	I_{EBO}	$V_{EB}=5\text{V}, I_C=0$			0.5	μA
DC current gain	h_{FE}	$V_{CE}=2\text{V}, I_C=0.5\text{A}$	120		390	
Collector- emitter saturation voltage	$V_{CE(sat)}$	$I_C=4\text{A}, I_B=100\text{mA}$			1	V
Transition frequency	f_T	$V_{CE}=6\text{V}, I_C=50\text{mA}, f=100\text{MHz}$		150		MHz
Collector output capacitance	C_{ob}	$V_{CB}=20\text{V}, I_E=0, f=1\text{MHz}$	30			pF

CLASSIFICATION OF h_{FE}

Rank	Q	R
Range	120- 270	180- 390

Typical Characteristics

