

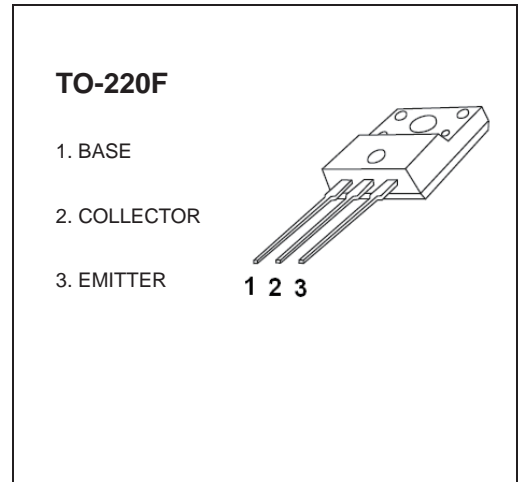
## FTD2058 TRANSISTOR (NPN)

### FEATURES

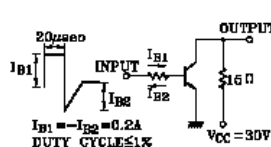
- Low  $V_{CE(sat)}$ :  $V_{CE(sat)}=1.0V(Max.) (I_C/I_B=2A/0.2A)$
- Complementary to FTB1366

### MAXIMUM RATINGS ( $T_a=25^\circ C$ unless otherwise noted)

Symbol	Parameter	Value	Unit
$V_{CBO}$	Collector-Base Voltage	60	V
$V_{CEO}$	Collector-Emitter Voltage	60	V
$V_{EBO}$	Emitter-Base Voltage	7	V
$I_C$	Collector Current -Continuous	3	A
$P_C$	Collector power dissipation	2	W
$T_J$	Junction temperature	150	$^\circ C$
$T_{stg}$	Storage Temperature	-55-150	$^\circ C$



### ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ C$ unless otherwise specified)

Parameter		Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage		$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	60			V
Collector-emitter breakdown voltage		$V_{(BR)CEO}$	$I_C=50mA, I_B=0$	60			V
Emitter-base breakdown voltage		$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	7			V
Collector cut-off current		$I_{CBO}$	$V_{CB}=60V, I_E=0$			100	$\mu A$
Emitter cut-off current		$I_{EBO}$	$V_{EB}=7V, I_C=0$			100	$\mu A$
DC current gain		$h_{FE(1)}$	$V_{CE}=5V, I_C=0.5A$	60		200	
Collector-emitter saturation voltage		$V_{CE(sat)}$	$I_C=2A, I_B=0.2A$			1	V
Base-emitter voltage		$V_{BE(on)}$	$V_{CE}=5V, I_C=0.5A$			1	V
Transition frequency		$f_T$	$V_{CE}=5V, I_C=0.5A$		3		MHz
Collector output capacitance		$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$		35		pF
Switching time	Turn-on Time	$t_{on}$	 <p><math>I_{B1} = -I_{B2} = 0.2A</math> DUTY CYCLE <math>\leq 1\%</math></p>		0.65		us
	Storage Time	$t_{stg}$			1.3		
	Fall Time	$t_f$			0.65		

### CLASSIFICATION OF $h_{FE(1)}$

Rank	O	Y
Range	60-120	100-200

