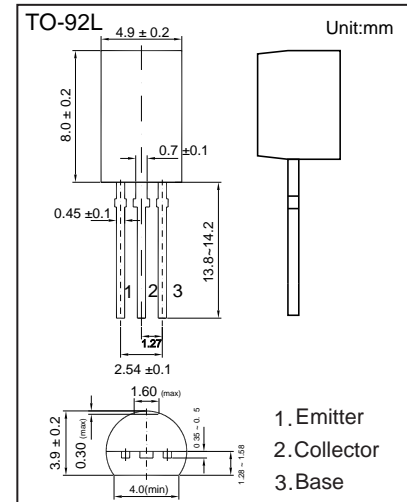


### FEATURES

- Low Saturation Voltage:  $V_{CE(sat)}=0.5V(\text{Max})(I_C=1A)$
- High Speed Switching Time:  $t_{stg}=1\mu s(\text{Typ.})$
- Complementary to FTA1020

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

Symbol	Parameter	Symbol	Unit
$V_{CBO}$	Collector-Base Voltage	50	V
$V_{CEO}$	Collector-Emitter Voltage	50	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current –Continuous	2	A
$P_C$	Collector Power Dissipation	0.9	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	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	5			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=50V, I_E=0$			1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=5V, I_C=0$			1	$\mu A$
DC current gain	$h_{FE(1)}$	$V_{CE}=2V, I_C=500mA$	70		240	
	$h_{FE(2)}$	$V_{CE}=2V, I_C=1.5A$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=1A, I_B=0.05A$			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=1A, I_B=0.05A$			1.2	V
Transition frequency	$f_T$	$V_{CE}=2V, I_C=0.5A$		100		MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$		30		pF
Switch time	Tune on Time	$V_{CC}=30V, I_C=1A, I_{B1}=-I_{B2}=0.05A$		0.15		$\mu s$
	Storage Time			1		
	Fall Time			0.15		

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

Rank	O	Y
Range	70-140	120-240



### Static Characteristic

