

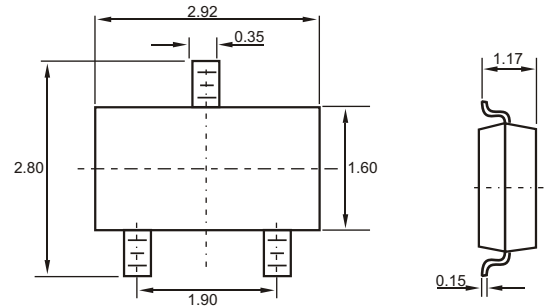
SOT-23-3L



1. BASE
2. EMITTER
3. COLLECTOR

Features

- ◇ Large collector current I_C
- ◇ Complements the 2SD0602A.



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

Dimensions in inches and (millimeters)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-500	mA
P_C	Collector Power Dissipation	200	mW
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55-150	$^\circ\text{C}$

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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-10\mu\text{A}, I_E=0$	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-10\text{mA}, I_B=0$	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-10\mu\text{A}, I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=-20\text{V}, I_E=0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5\text{V}, I_C=0$			-0.1	μA
DC current gain	h_{FE1}	$V_{CE}=-10\text{V}, I_C=-150\text{mA}$	85		340	
	h_{FE2}	$V_{CE}=-10\text{V}, I_C=-500\text{mA}$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-300\text{mA}, I_B=-30\text{mA}$			-0.6	V
Base -emitter saturation voltage	$V_{BE(sat)}$	$I_C=-300\text{mA}, I_B=-30\text{mA}$			-1.5	V
Transition frequency	f_T	$V_{CE}=-10\text{V}, I_C=-50\text{mA}, f=200\text{MHz}$		200		MHz
Collector output capacitance	C_{ob}	$V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$		15		pF

CLASSIFICATION OF h_{FE1}

Rank	Q	R	S
Range	85-170	120-240	170-340
marking	DQ	DR	DS

Typical Characteristics

