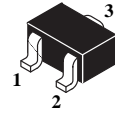
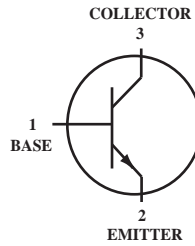


General Purpose Transistor
NPN Silicon
(Pb) Lead(Pb)-Free

SOT-323(SC-70)
FEATURES

- * High voltage and high current
- * Excellent h_{FE} linearity
- * High h_{FE}
- * Low noise
- * Complementary to 2SA1586

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

Parameter	Symbol	Value	Units
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current -Continuous	I_C	150	mA
Collector Power Dissipation	P_C	100	mW
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Junction and Storage Temperature	T_{stg}	-55 to +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	$V_{(BR)CBO}$	$I_C=100\mu\text{A}, I_E=0$	60	-	-	V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, I_B=0$	50	-	-	V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu\text{A}, I_C=0$	5	-	-	V
Collector cut-off current	I_{CBO}	$V_{CB}=60\text{V}, I_E=0$	-	-	0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5\text{V}, I_C=0$	-	-	0.1	μA
DC current gain	h_{FE}	$V_{CE}=6\text{V}, I_C=2\text{mA}$	70	-	700	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=100\text{mA}, I_B=10\text{mA}$	-	-	0.25	V
Transition frequency	f_T	$V_{CE}=10\text{V}, I_C=1\text{mA}$,	80	-	-	MHz
Collector output capacitance	C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$	-	-	3.5	pF
Noise figure	NF	$V_{CE}=6\text{V}, I_C=0.1\text{mA}$, $f=1\text{KHz}, R_g=10\text{K}\Omega$	-	-	10	dB

CLASSIFICATION OF h_{FE}

Rank	O	Y	GR	BL
Range	70-140	120-240	200-400	350-700
Marking	LO	LY	LG	LL

