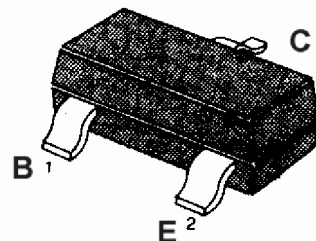


**APPLICATION:** General Purpose Applications.

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

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	$V_{CB0}$	-50	V
Collector-emitter voltage	$V_{CE0}$	-45	V
Emitter-base voltage	$V_{EB0}$	-5	V
Collector current	$I_c$	-100	mA
Collector Power Dissipation	$P_c$	200	mW
Junction Temperature	$T_J$	150	$^{\circ}\text{C}$
Storage Temperature Range	$T_{stg}$	- 55~150	$^{\circ}\text{C}$

**SOT-23**


1.Base 2 .Emitter 3 .Collector

**ELECTRICAL CHARACTERISTICS** ( $T_a=25^{\circ}\text{C}$ )

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
DC Current Gain	$h_{FE}$	70		400		$V_{CE}=-6V, I_c=-2mA$
Collector Cut-off Current	$I_{CBO}$			-0.1	$\mu A$	$V_{CB}=-50V, I_E=0$
Emitter Cut-off Current	$I_{EBO}$			-0.1	$\mu A$	$V_{EB}=-5V, I_c=0$
Collector-Base Breakdown Voltage	$BV_{CB0}$	-50			V	$I_c=-0.1mA, I_E=0$
Collector-Emitter Breakdown Voltage	$BV_{CE0}$	-45			V	$I_c=-1mA, I_B=0$
Emitter-Base Breakdown Voltage	$BV_{EB0}$	-5			V	$I_E=-0.1mA, I_c=0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-0.3	V	$I_c=-100mA, I_B=-10mA$
Gain bandwidth product	$f_t$	80			MHz	$I_c=-1mA, V_{CE}=-10V$
Common Base Output Capacitance	$C_{ob}$		4	7	PF	$V_{CB}=-10V, I_E=0, f=1MHz$
Noise Figure	$N_F$		1	10	dB	$V_{CE}=-6V, I_c=-0.1mA, f=1KHz, R_g=10K\Omega$

 **$h_{FE}$  Classification And Marking**

Print Mark	FQ	FR
Classification	Y	G
$h_{FE}$	120~240	200~400