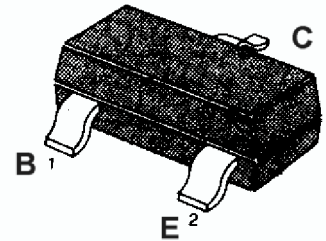


**APPLICATION:** Switching and Amplifier Applications.

**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	$I_c$	-500	mA
Collector Power Dissipation	$P_c$	350	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	$h_{FE1}$	100		630		$V_{CE} = -1V, I_c = -100mA$
	$h_{FE2}$	40				$V_{CE} = -1V, I_c = -300mA$
Collector Cut-off Current	$I_{CB0}$			-0.1	$\mu A$	$V_{CB} = -45V, I_E = 0$
Emitter Cut-off Current	$I_{EB0}$			-0.1	$\mu A$	$V_{EB} = -4V, I_c = 0$
Collector-Base Breakdown Voltage	$BV_{CB0}$	-50			V	$I_c = -0.1mA, I_E = 0$
Collector-Emitter Breakdown Voltage	$BV_{CE0}$	-45			V	$I_c = -10mA, I_B = 0$
Emitter-Base Breakdown Voltage	$BV_{EB0}$	-5			V	$I_E = -0.1mA, I_c = 0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-0.7	V	$I_c = -500mA, I_B = -50mA$
Gain bandwidth product	$f_T$	50	100		MHz	$I_c = -10mA, V_{CE} = -5V, f = 50MHz$
Common Base Output Capacitance	$C_{ob}$			12	PF	$V_{CB} = -10V, I_E = 0, f = 1MHz$

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

Print Mark	5Cr	5Cs	5Ct
Classification	16	25	40
$h_{FE1}$	100~250	160~400	250~630