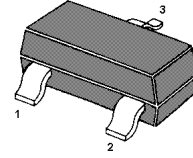


## PNP Silicon Epitaxial Planar Transistor

for low frequency amplification applications

The transistor is subdivided into two groups E and F, according to its DC current gain.

**MARKING: hFE(E):ME**  
**hFE(F):MF**



1.Base 2.Emitter 3.Collector  
SOT-23 Plastic Package

### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	60	V
Collector Emitter Voltage	$-V_{CEO}$	50	V
Emitter Base Voltage	$-V_{EBO}$	6	V
Collector Current	$-I_C$	200	mA
Power Dissipation	$P_{tot}$	200	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_s$	- 55 to + 150	$^\circ\text{C}$

### Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at $-V_{CE} = 6\text{ V}$ , $-I_C = 1\text{ mA}$ Current Gain Group at $-V_{CE} = 6\text{ V}$ , $-I_C = 0.1\text{ mA}$	E	$h_{FE}$	150	-	300	-
	F	$h_{FE}$	250	-	500	-
	$h_{FE}$	90	-	-	-	
Collector Base Breakdown Voltage at $-I_C = 100\text{ }\mu\text{A}$	$-V_{(BR)CBO}$	60	-	-	V	
Collector Emitter Breakdown Voltage at $-I_C = 100\text{ }\mu\text{A}$	$-V_{(BR)CEO}$	50	-	-	V	
Emitter Base Breakdown Voltage at $-I_C = 100\text{ }\mu\text{A}$	$-V_{(BR)EBO}$	6	-	-	V	
Collector Cutoff Current at $-V_{CB} = 48\text{ V}$	$-I_{CBO}$	-	-	0.1	$\mu\text{A}$	
Emitter Cutoff Current at $-V_{EB} = 6\text{ V}$	$-I_{EBO}$	-	-	0.1	$\mu\text{A}$	
Collector Emitter Saturation Voltage at $-I_C = 100\text{ mA}$ , $-I_B = 10\text{ mA}$	$-V_{CE(sat)}$	-	-	0.3	V	
Base Emitter Saturation Voltage at $-I_C = 100\text{ mA}$ , $-I_B = 10\text{ mA}$	$-V_{BE(sat)}$	-	-	1	V	
Gain Bandwidth Product at $-V_{CE} = 6\text{ V}$ , $-I_C = 10\text{ mA}$	$f_T$	-	200	-	MHz	
Collector Output Capacitance at $-V_{CB} = 6\text{ V}$ , $f = 1\text{ MHz}$	$C_{ob}$	-	4	-	pF	
Noise Figure at $-V_{CE} = 6\text{ V}$ , $I_E = 0.3\text{ mA}$ , $f = 100\text{ Hz}$ , $R_G = 10\text{ K}\Omega$	NF	-	-	20	dB	

