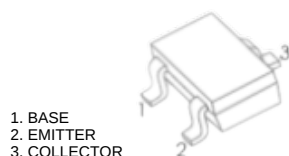


General Description

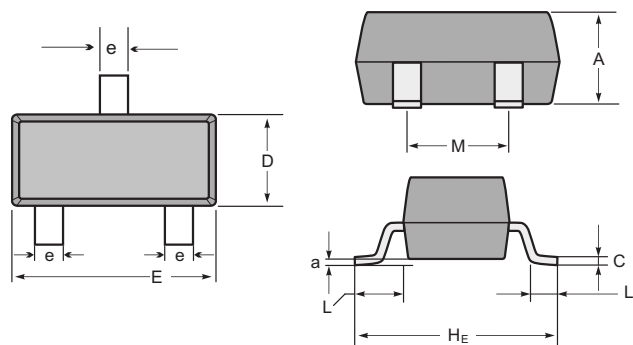
The transistor is subdivided into three groups Q, R and S according to its DC current gain.

On special request, these transistors can be manufactured in different pin configurations.



SOT-23

SOT-23



SOT-23 mechanical data

UNIT		A	C	D	E	H _E	e	M	L	L ₁	a
mm	max	1.1	0.15	1.4	3.0	2.6	0.5	1.95	0.55	0.36	0.0
	min	0.9	0.08	1.2	2.8	2.2	0.3	1.7	(ref)	(ref)	0.15
mil	max	43	6	55	118	102	20	77	22	14	0.0
	min	35	3	47	110	87	12	67	(ref)	(ref)	6

Absolute Maximum Rating (Ta=25°C)

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	60	V
Collector Current	$-I_C$	150	mA
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_s	-55 to +150	°C

2SA1037-R

Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain at $-V_{CE}=6V$, $-I_C=1mA$	Q R S h_{FE} h_{FE} h_{FE}	120 180 270	270 390 560	- - -
Collector Cutoff Current at $-V_{CB}=60V$	$-I_{CBO}$	-	0.1	μA
Emitter Cutoff Current at $-V_{EB}=6V$	$-I_{EBO}$	-	0.1	μA
Collector Saturation Voltage at $-I_C=50mA$, $-I_B=5mA$	$-V_{CE(sat)}$	-	0.5	V
Collector Base Breakdown Voltage at $-I_C=50\mu A$	$-V_{(BR)CBO}$	60	-	V
Collector Emitter Breakdown Voltage at $-I_C=1mA$	$-V_{(BR)CEO}$	50	-	V
Emitter Base Breakdown Voltage at $-I_E=50\mu A$	$-V_{(BR)EBO}$	6	-	V
Transition Frequency at $-V_{CE}=12V$, $-I_C=2mA$, $f=30MHz$	f_T	120	-	MHz

RATING AND CHARACTERISTIC CURVES (2SA1037-R)

