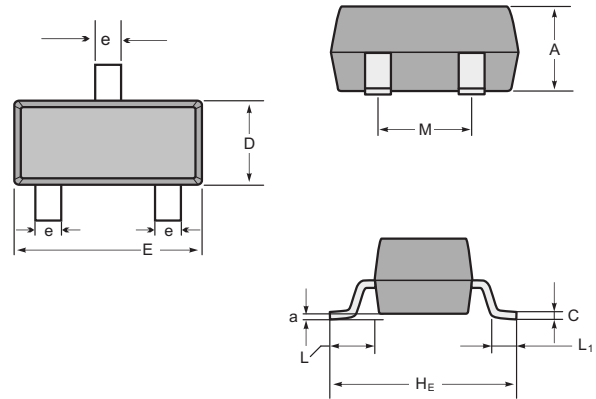
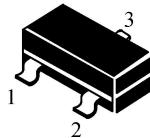


for microwave low noise amplifier at VHF, UHF and CATV band

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

SOT-23

1. BASE
2. EMITTER
3. COLLECTOR



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 (ref)	0.36 (ref)	0.0
	min	0.9	0.08	1.2	2.8	2.2	0.3	1.7			0.15
mil	max	43	6	55	118	102	20	77	22 (ref)	14 (ref)	0.0
	min	35	3	47	110	87	12	67			6

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Collector Base Voltage	V _{CBO}	20	V
Collector Emitter Voltage	V _{CEO}	12	V
Emitter Base Voltage	V _{EBO}	3	V
Collector Current	I _C	100	mA
Power Dissipation	P _{tot}	200	mW
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _s	- 65 to + 150	°C

2SC3356

Characteristics ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE} = 10\text{ V}$, $I_C = 20\text{ mA}$ Current Gain Group Q R S	h_{FE}	50	-	100	-
	h_{FE}	80	-	160	-
	h_{FE}	125	-	250	-
Collector Cutoff Current at $V_{CB} = 10\text{ V}$	I_{CBO}	-	-	1	μA
Emitter Cutoff Current at $V_{EB} = 1\text{ V}$	I_{EBO}	-	-	1	μA
Gain Bandwidth Product at $V_{CE} = 10\text{ V}$, $I_C = 20\text{ mA}$	f_T	-	7	-	GHz
Feed-Back Capacitance at $V_{CB} = 10\text{ V}$, $f = 1\text{ MHz}$	$C_{re}^{1)}$	-	0.55	1	pF
Noise Figure at $V_{CE} = 10\text{ V}$, $I_C = 7\text{ mA}$, $f = 1\text{ GHz}$	NF	-	1.1	2	dB

¹⁾ The emitter terminal and the case shall be connected to the guard terminal of the three-terminal capacitance bridge.

RATING AND CHARACTERISTIC CURVES (2SC3356)

