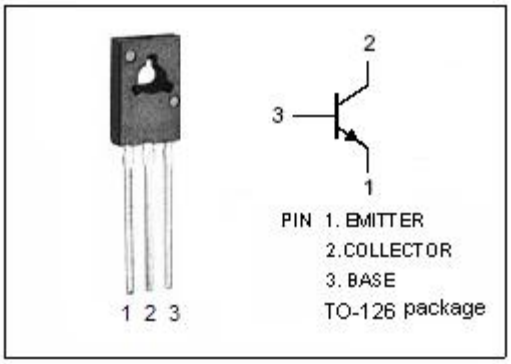
isc Silicon NPN Power Transistor 2SC1953

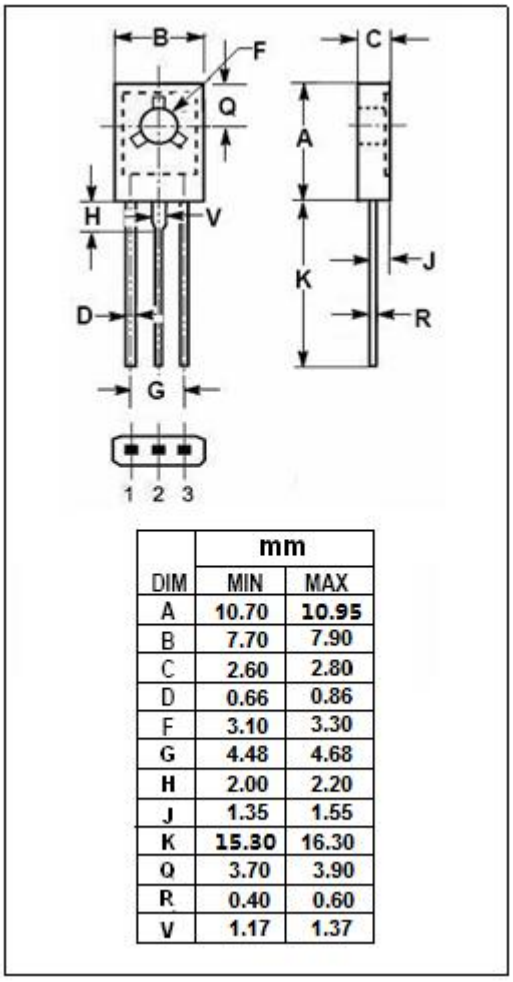
DESCRIPTION

- High Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= 150V(Min)
- Good Linearity of h_{FE}
- Complement to Type 2SA914
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

- Designed for low-frequency power pre-amplification,which is optimum for the pre-driver stage of a 60 W to 100 W output amplifier.



DIM	mm MIN	mm MAX
A	10.70	10.95
B	7.70	7.90
C	2.60	2.80
D	0.66	0.86
F	3.10	3.30
G	4.48	4.68
H	2.00	2.20
J	1.35	1.55
K	15.30	16.30
Q	3.70	3.90
R	0.40	0.60
V	1.17	1.37

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	150	V
V_{CEO}	Collector-Emitter Voltage	150	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	50	mA
I_{CP}	Collector Current-Peak	100	mA
P_C	Collector Power Dissipation @ T_a=25℃	1.2	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 0.1mA ; I_B= 0	150			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Vltage	I_E= 10 μ A ; I_C= 0	5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 30mA; I_B= 3mA			1	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 100V; I_E= 0			1	μ A
I_{EBO}	Emitter Cutoff Current	V_{EB}= 4V; I_C= 0			1	μ A
h_{FE}	DC Current Gain	I_C= 10mA ; V_{CE}= 5V	130		330	
f_T	Current-Gain—Bandwidth Product	I_C= 10mA;V_{CE}= 10V,f_{test}= 200MHz	70			MHz
C_{OB}	Output Capacitance	I_E= 0 ; V_{CB}= 10V,f_{test}= 1MHz			3	pF

◆ **h_{FE} Classifications**

Q	R
130-220	185-330

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