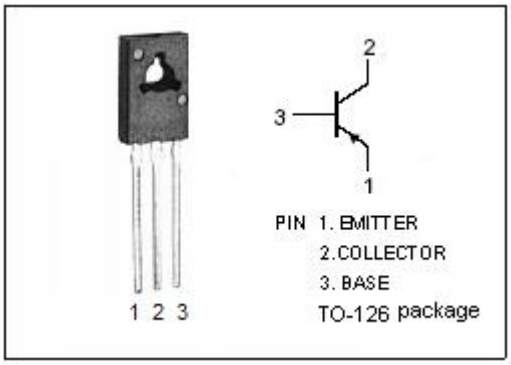
isc Silicon PNP Power Transistor — KSE210

DESCRIPTION

- High Collector Current-I_C= -5A
- Low Saturation Voltage -
  : $V_{CE(sat)}$= -0.3V(Max)@ I_C= -0.5A, I_B= -50mA
- Good Linearity of h_{FE}
- Complement to Type KSE200
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

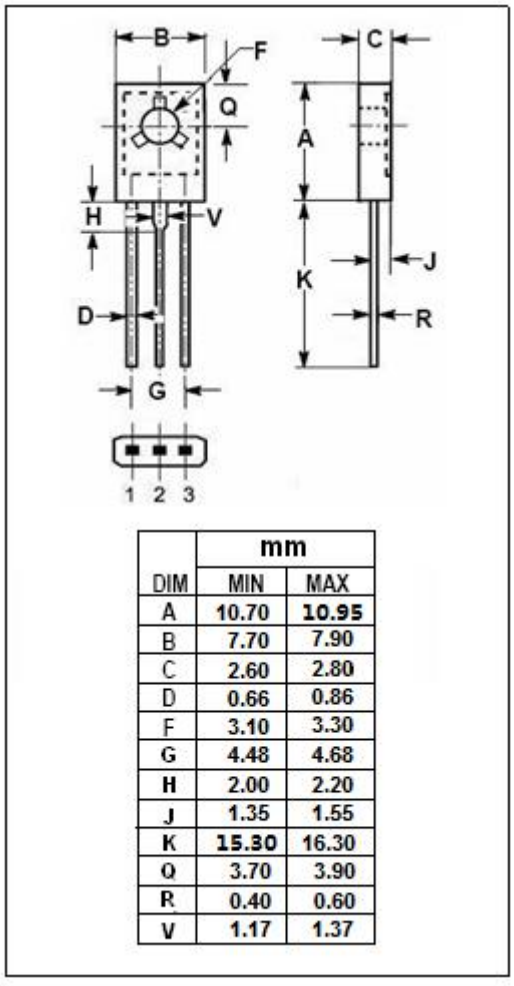


APPLICATIONS

- Suited for watts audio amplifier, voltage regulator, DC-DC converter and relay driver.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-25	V
V_{EBO}	Emitter-Base Voltage	-8	V
I_C	Collector Current-Continuous	-5	A
P_C	Collector Power Dissipation @ T_C=25℃	15	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-65~150	℃



DIM	mm MIN	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

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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= -10mA; I_B= 0	-25			V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	I_C= -0.5A; I_B= -50mA			-0.3	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	I_C= -2A; I_B= -0.2A			-0.75	V
$V_{CE(sat)-3}$	Collector-Emitter Saturation Voltage	I_C= -5A; I_B= -1A			-1.8	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= -5A; I_B= -1A			-2.5	V
$V_{BE(on)}$	Base-Emitter On Voltage	I_C= -2A; V_{CE}= -1V			-1.6	V
I_{CBO}	Collector Cutoff Current	V_{CB}= -40V; I_E= 0 V_{CB}= -40V; I_E= 0; T_C= 125℃			-0.1 -100	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= -8V; I_C= 0			-0.1	μA
h_{FE-1}	DC Current Gain	I_C= -0.5A; V_{CE}= -1V	70			
h_{FE-2}	DC Current Gain	I_C= -2A; V_{CE}= -1V	45		180	
h_{FE-3}	DC Current Gain	I_C= -5A; V_{CE}= -2V	10			
f_T	Current-Gain—Bandwidth Product	I_C= -0.1A; V_{CE}= -10V	65			MHz
C_{OB}	Output Capacitance	I_E= 0; V_{CB}= -10V, f_{test}= 0.1MHz			120	pF