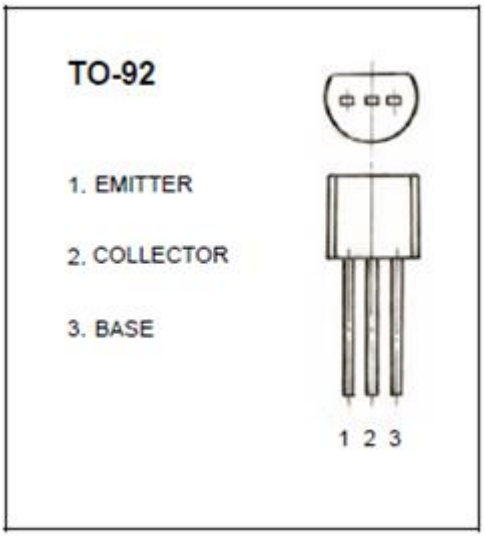
isc Silicon NPN Transistor 2SC2120



DESCRIPTION

- High hFE(1)=100-320
- 1 Watts Amplifier Applications
- Complement to Type 2SA950
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Audio power amplifier Applications

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	35	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Curren	800	mA
I_B	Base Curren	160	mA
P_C	Collector Power Dissipation @T_C=25℃	600	mW
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= 10mA; I_B= 0	30			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 500mA ; I_B= 20mA			0.5	V
$V_{BE(on)}$	Base-Emitter On Voltage	I_C= 10mA ; V_{CE}= 1V	0.5		0.8	V
I_{CBO}	Emitter Cutoff Current	V_{CB}= 35V; I_E= 0			0.1	μA
I_{EBO}	Collector Cutoff Current	V_{EB}= 5V; I_C= 0			0.1	μA
$h_{FE(1)}$	DC Current Gain	I_C= 0.1A ; V_{CE}= 1V	100		320	
$h_{FE(2)}$	DC Current Gain	I_C= 0.7A ; V_{CE}= 1V	35			
f_T	Current-Gain—Bandwidth Product	I_C= 10mA; V_{CE}= 5V; f= 100MHz		120		MHz
Cob	Collector Output Capacitance	V_{CB}=10V; I_E=0; f=1MHz		13		pF

◆ **$h_{FE(1)}$ Classifications**

O	Y
100-200	160-320