

Silicon PNP Power Transistor

2SA1120

DESCRIPTION

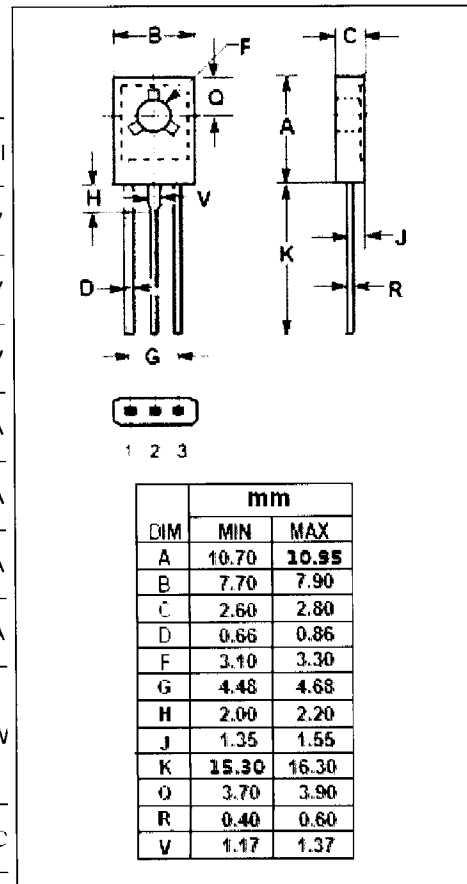
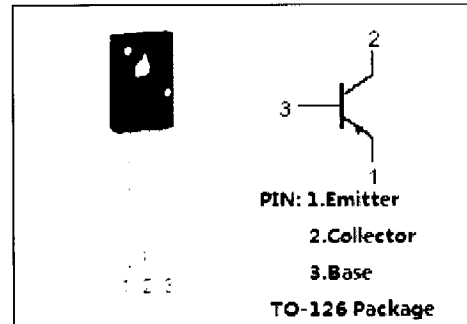
- Collector-Emitter Breakdown Voltage-
 : $V_{(BR)CEO} = -20V$ (Min)
- Low Collector Saturation Voltage-
 : $V_{CE(sat)} = -1.0V$ (Max.)@ $I_C = 0.1A$

APPLICATIONS

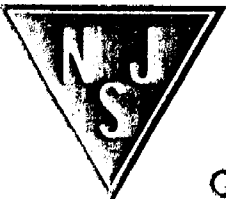
- Strobe flash applications
- Audio power amplifier applications

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNI
V_{CBO}	Collector-Base Voltage	-35	V
V_{CEO}	Collector-Emitter Voltage	-20	V
V_{EBO}	Emitter-Base Voltage	-8	V
I_C	Collector Current-Continuous	-5	A
I_{CM}	Collector Current-Peak	-8	A
I_E	Emitter Current-Continuous	5	A
I_{EM}	Emitter Current-Peak	8	A
P_C	Collector Power Dissipation @ $T_a=25^\circ C$	1.0	W
	Collector Power Dissipation @ $T_C=25^\circ C$	10	
T_J	Junction Temperature	150	°C
T_{stg}	Storage Temperature Range	-55~150	°C



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ELECTRICAL CHARACTERISTICS

$T_C=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -10\text{mA}; I_B = 0$	-20			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E = -1\text{mA}; I_C = 0$	-8			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -4\text{A}; I_B = -0.1\text{A}$			-1.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = -4\text{A}; V_{CE} = -2\text{V}$			-1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -35\text{V}; I_E = 0$			-100	nA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -8\text{V}; I_C = 0$			-100	nA
h_{FE-1}	DC Current Gain	$I_C = -0.5\text{A}; V_{CE} = -2\text{V}$	100		320	
h_{FE-2}	DC Current Gain	$I_C = -4\text{A}; V_{CE} = -2\text{V}$	70			
f_T	Current-Gain—Bandwidth Product	$I_E = 0.5\text{A}; V_{CE} = -2\text{V}$		170		MHz
C_{OB}	Output Capacitance	$I_E = 0; V_{CB} = -10\text{V}; f = 1.0\text{MHz}$		62		pF

◆ h_{FE-1} Classifications

O	Y
100-200	160-320