

Silicon PNP Power Transistor

2SA743

DESCRIPTION

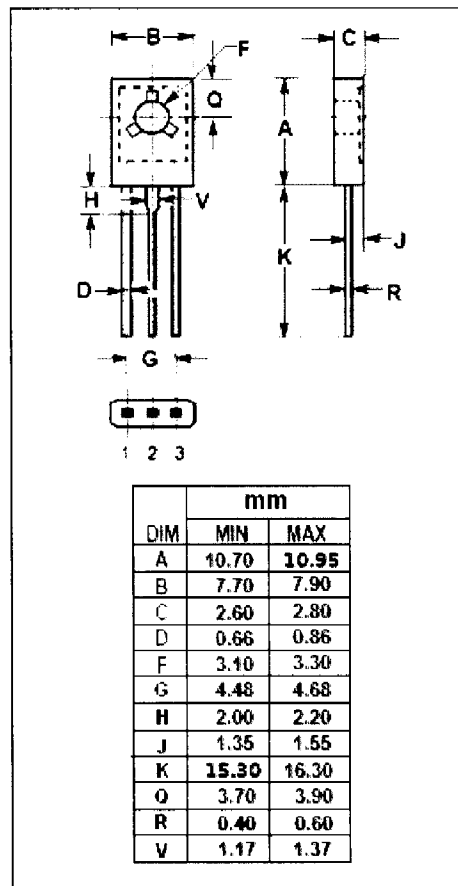
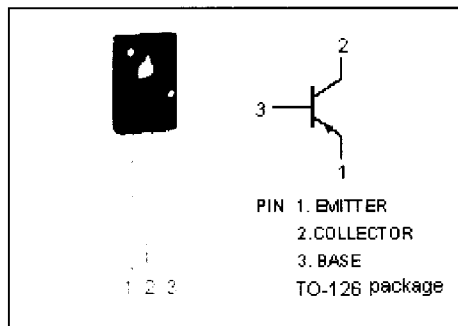
- Good Linearity of h_{FE}
- High Collector-Emitter Breakdown Voltage-
 $V_{(BR)CEO} = -50V$ (Min)
- Complement to Type 2SC1212

APPLICATIONS

- Designed for use in low frequency power amplifier applications.

ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ C$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-50	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-4	V
I_C	Collector Current-Continuous	-1	A
P_C	Collector Power Dissipation @ $T_a = 25^\circ C$	0.75	W
	Total Power Dissipation @ $T_C = 25^\circ C$	8	
T_J	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150	$^\circ C$



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ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C = -1\text{mA}; I_E = 0$	-50			V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -10\text{mA}; R_{BE} = \infty$	-50			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E = -1\text{mA}; I_C = 0$	-4			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -1\text{A}; I_B = -0.1\text{A}$			-1.5	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = -50\text{mA}; V_{CE} = -4\text{V}$			-1.0	V
I_{CER}	Collector Cutoff Current	$V_{CE} = -50\text{V}; R_{BE} = 1\text{k}\Omega$			-20	μA
h_{FE-1}	DC Current Gain	$I_C = -50\text{mA}; V_{CE} = -4\text{V}$	60		200	
h_{FE-2}	DC Current Gain	$I_C = -1\text{A}; V_{CE} = -4\text{V}$	20			
f_T	Current-Gain—Bandwidth Product	$I_C = -30\text{mA}; V_{CE} = -4\text{V}$		120		MHz

◆ h_{FE-1} Classifications

B	C
60-120	100-200