

**Silicon PNP Power Transistor**

**2SA743A**

**DESCRIPTION**

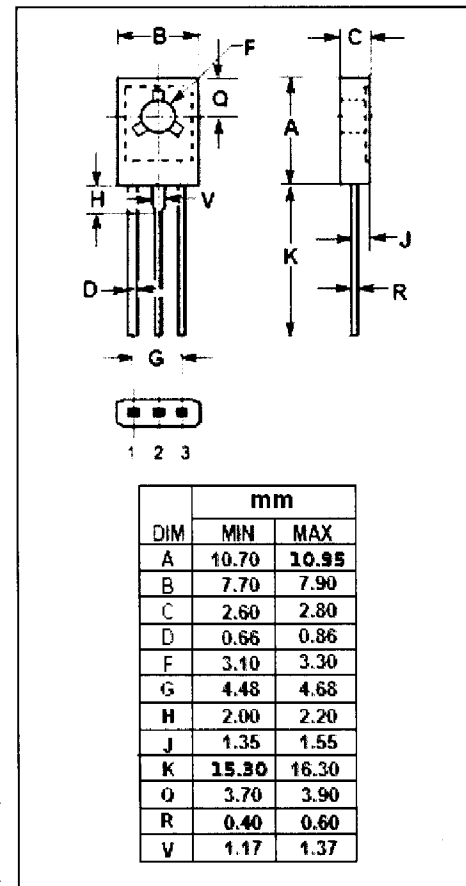
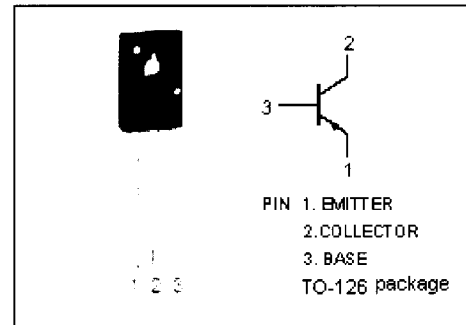
- Good Linearity of  $h_{FE}$
- High Collector-Emitter Breakdown Voltage-  
 $V_{(BR)CEO} = -80V$  (Min)
- Complement to Type 2SC1212A

**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	-80	V
$V_{CEO}$	Collector-Emitter Voltage	-80	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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# 2SA743A

## 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	$I_C = -1\text{mA}; I_E = 0$	-80			V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -10\text{mA}; R_{BE} = \infty$	-80			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	$V_{CE} = -80\text{V}; R_{BE} = 1\text{k}\Omega$			-20	$\mu\text{A}$
$h_{FE-1}$	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