

DESCRIPTION

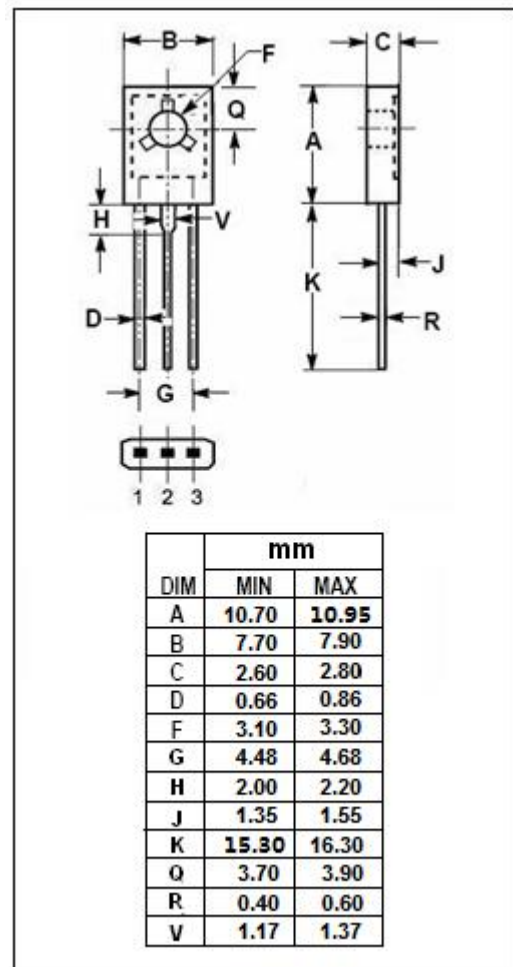
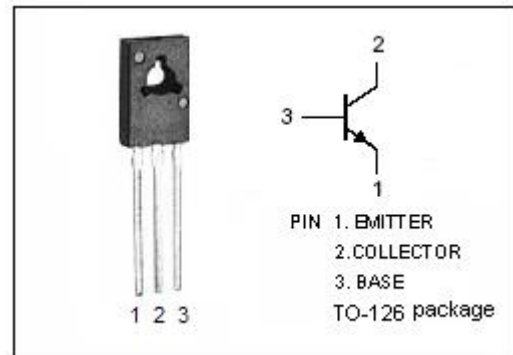
- Silicon NPN epitaxial planar type
- Low Collector-Emitter Breakdown Voltage
- Good Linearity of h_{FE}
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for low voltage type medium output power amplifications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	18	V
V_{CEO}	Collector-Emitter Voltage	18	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	1	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	0.12	W
	Collector Power Dissipation @ $T_a=25^\circ\text{C}$	1.2	
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon NPN Power Transistor
2SC1568
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	$I_C=1\text{mA}; I_E=0$	18			V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C=10\text{mA}; R_{BE}=\infty$	18			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E=1\text{mA}; I_C=0$	5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=1.0\text{A}; I_B=50\text{mA}$			0.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=0.5\text{A}; I_B=50\text{mA}$			1.2	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=18\text{V}; I_E=0$			10	μA
h_{FE-1}	DC Current Gain	$I_C=500\text{mA}; V_{CE}=2\text{V}$	90		280	
h_{FE-2}	DC Current Gain	$I_C=1.5\text{A}; V_{CE}=2\text{V}$	50			
f_T	Current-Gain—Bandwidth Product	$I_C=50\text{mA}; V_{CE}=6\text{V}$		150		MHz

◆ h_{FE} Classifications

Q	R	S
90-155	130-210	180-280

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