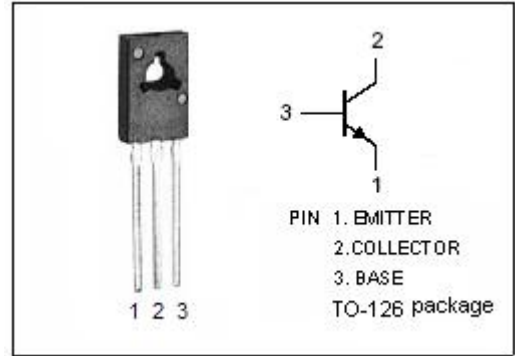


isc Silicon NPN Power Transistor
2SC2258
DESCRIPTION

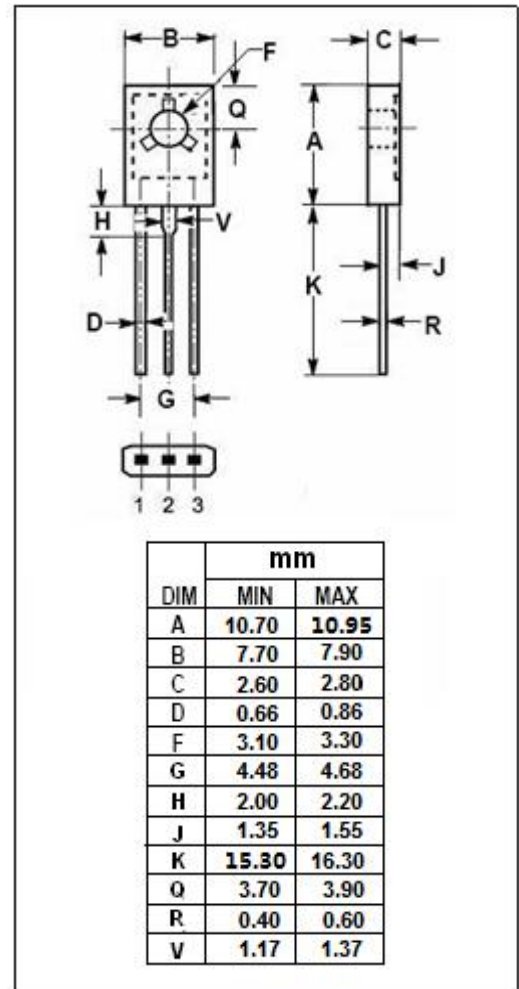
- High Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 250V(\text{Min})$
- High Current-Gain Bandwidth Product
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- For high breakdown voltage general amplification
- For video output amplification


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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	250	V
V_{CEO}	Collector-Emitter Voltage	250	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	0.1	A
I_{CM}	Collector Current-Peak	0.15	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	4	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

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ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E = 0.1\text{mA}; I_C = 0$	7			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = 50\text{mA}; I_B = 5\text{mA}$			1.2	V
$V_{BE(on)}$	Collector-Emitter On Voltage	$I_C = 40\text{mA}; V_{CE} = 20\text{V}$			1.2	V
I_{CER}	Collector Cutoff Current	$V_{CE} = 250\text{V}; R_{BE} = 100\text{k}\Omega$			100	μA
h_{FE-1}	DC Current Gain	$I_C = 40\text{mA}; V_{CE} = 20\text{V}$	40			
h_{FE-2}	DC Current Gain	$I_C = 5\text{mA}; V_{CE} = 50\text{V}$	30			
f_T	Current-Gain—Bandwidth Product	$I_E = -10\text{mA}; V_{CB} = 10\text{V}; f_{test} = 200\text{MHz}$		100		MHz
C_{OB}	Output Capacitance	$I_E = 0; V_{CB} = 50\text{V}; f_{test} = 1\text{MHz}$		3		pF

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