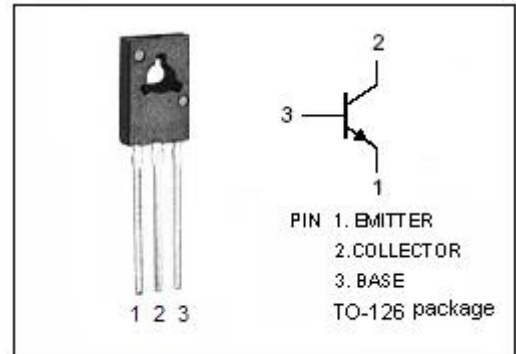


**isc Silicon NPN Power Transistor**
**2SC2582**
**DESCRIPTION**

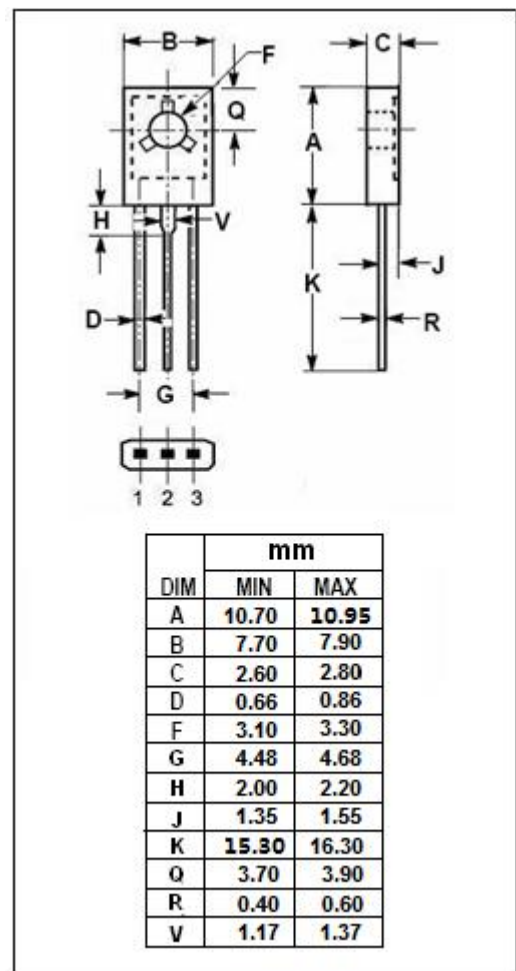
- Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = 35V(\text{Min})$
- Good Linearity of  $h_{FE}$
- High Collector Power Dissipation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Designed for AF power amplifier applications.


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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	45	V
$V_{CEO}$	Collector-Emitter Voltage	35	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current-Continuous	1	A
$I_{CM}$	Collector Current-Peak	1.5	A
$P_C$	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	10	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

2SC2582

## 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	$I_C=1\text{mA}; I_E=0$	45			V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C=2\text{mA}; I_B=0$	35			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=0.5\text{A}; I_B=50\text{mA}$			0.5	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB}=20\text{V}; I_E=0$			0.1	$\mu\text{A}$
$I_{CEO}$	Collector Cutoff Current	$V_{CE}=20\text{V}; I_B=0$			100	$\mu\text{A}$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}=5\text{V}; I_C=0$			10	$\mu\text{A}$
$h_{FE-1}$	DC Current Gain	$I_C=0.5\text{A}; V_{CE}=10\text{V}$	85		340	
$h_{FE-2}$	DC Current Gain	$I_C=1\text{A}; V_{CE}=5\text{V}$	50			
$f_T$	Current-Gain—Bandwidth Product	$I_E=-50\text{mA}; V_{CB}=10\text{V}; f=200\text{MHz}$		200		MHz
$C_{OB}$	Output Capacitance	$I_E=0; V_{CB}=10\text{V}; f_{test}=1\text{MHz}$			20	pF

◆  $h_{FE}$  Classifications

Q	R	S
85-170	120-240	170-340

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