

**isc Silicon NPN Power Transistor**
**2SD882**
**DESCRIPTION**

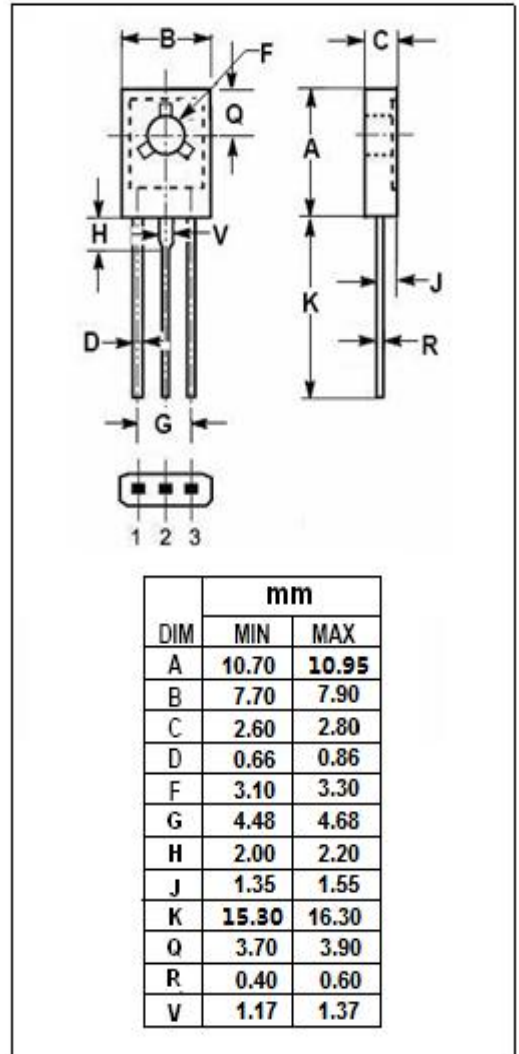
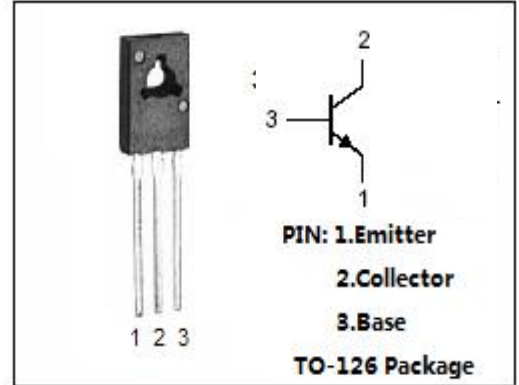
- High Collector Current- $I_C= 3.0A$
- Low Saturation Voltage -  
:  $V_{CE(sat)}= 0.5V(\text{Max})@ I_C= 2.0A, I_B= 0.2A$
- Good Linearity of  $h_{FE}$
- Complement to Type 2SB772
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Suited for the output stage of 3 watts audio amplifier, voltage regulator, DC-DC converter and relay driver.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	40	V
$V_{CEO}$	Collector-Emitter Voltage	30	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current-Continuous	3.0	A
$I_{CP}$	Collector Current-Pulse	7.0	A
$P_C$	Collector Power Dissipation @ $T_a=25^\circ\text{C}$	1.0	W
	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	10	
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ\text{C}$



**isc Silicon NPN Power Transistor****2SD882****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C= 2.0\text{A}; I_B= 0.2\text{A}$		0.3	0.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C= 2.0\text{A}; I_B= 0.2\text{A}$		1.0	2.0	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB}= 30\text{V}; I_E= 0$			1.0	$\mu\text{A}$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}= 3\text{V}; I_C= 0$			1.0	$\mu\text{A}$
$h_{FE-1}$	DC Current Gain	$I_C= 20\text{mA}; V_{CE}= 2\text{V}$	30	150		
$h_{FE-2}$	DC Current Gain	$I_C= 1\text{A}; V_{CE}= 2\text{V}$	60	160	400	
$f_T$	Current-Gain—Bandwidth Product	$I_C= 0.1\text{A}; V_{CE}= 5\text{V}$		90		MHz
$C_{OB}$	Output Capacitance	$I_E= 0; V_{CB}= 10\text{V}, f_{test}= 1\text{MHz}$		45		pF

**◆  $h_{FE-2}$  Classifications**

R	Q	P	E
60-120	100-200	160-320	200-400

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