

isc Silicon NPN Power Transistor

2SD882

DESCRIPTION

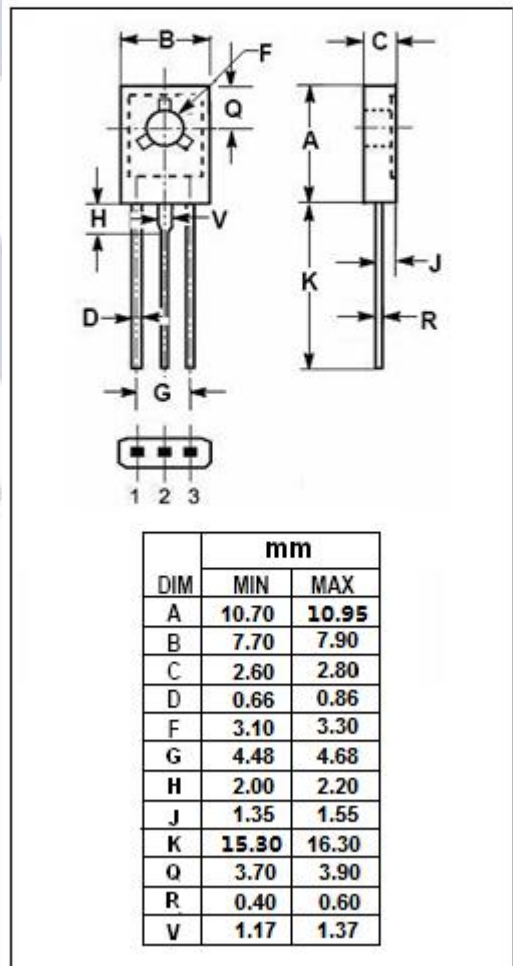
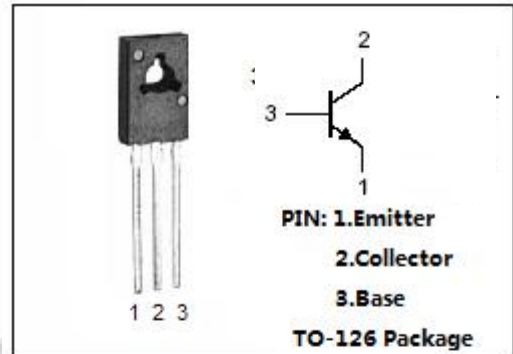
- High Collector Current- $I_C = 3.0A$
- Low Saturation Voltage -
: $V_{CE(sat)} = 0.5V(Max) @ I_C = 2.0A, I_B = 0.2A$
- Good Linearity of h_{FE}
- Complement to Type 2SB772
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

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

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

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 @ $T_a = 25^\circ C$	1.0	W
	Collector Power Dissipation @ $T_c = 25^\circ C$	10	
T_J	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150	$^\circ C$



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ELECTRICAL CHARACTERISTICS

 T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 2.0A; I _B = 0.2A		0.3	0.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 2.0A; I _B = 0.2A		1.0	2.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 30V; I _E = 0			1.0	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 3V; I _C = 0			1.0	μ A
h _{FE-1}	DC Current Gain	I _C = 20mA; V _{CE} = 2V	30			
h _{FE-2}	DC Current Gain	I _C = 1A; V _{CE} = 2V	60		400	
f _T	Current-Gain—Bandwidth Product	I _C = 0.1A; V _{CE} = 5V		90		MHz
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = 10V, f _{test} = 1MHz		45		pF

◆ h_{FE-2} Classifications

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