

isc Silicon NPN Power Transistor

2SC2877

DESCRIPTION

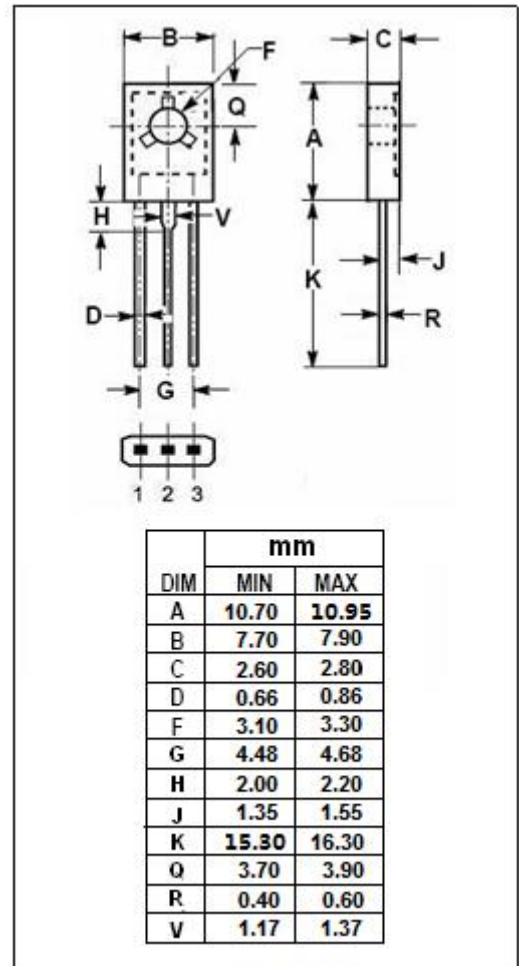
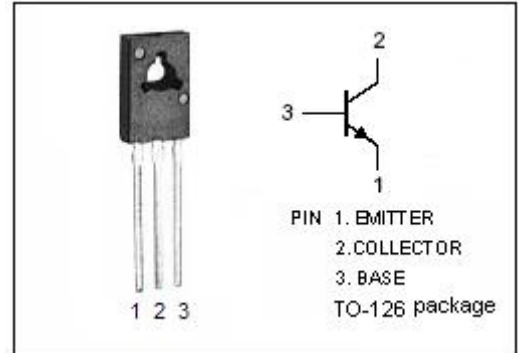
- Collector-Emitter Breakdown Voltage-
 $V_{(BR)CEO} = 40V$ (Min)
- Good Linearity of h_{FE}
- Complement to Type 2SA1217
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for audio frequency power amplifier and low speed switching applications.
- Suitable for output stage of 5 watts car radio and car stereo.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	40	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	3	A
I_B	Base Current-Continuous	1	A
P_C	Total Power Dissipation @ $T_C=25^{\circ}C$	10	W
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}C$



isc Silicon NPN Power Transistor**2SC2877****ELECTRICAL CHARACTERISTICS****T_c=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 10mA; I _B = 0	40			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 2A; I _B = 0.2A			0.8	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = 0.5A; V _{CE} = 2V			1.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 40V; I _E = 0			0.1	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			0.1	μ A
h _{FE-1}	DC Current Gain	I _C = 0.5A; V _{CE} = 2V	80		240	
h _{FE-2}	DC Current Gain	I _C = 2.5A; V _{CE} = 2V	25			
f _T	Current-Gain—Bandwidth Product	I _C = 0.5A; V _{CE} = 2V		100		MHz
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = 10V; f= 1.0MHz		35		pF

◆ h_{FE} Classifications

O	Y
80-160	120-240

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