

**Silicon NPN Power Transistors**

**2SC2877**

**DESCRIPTION**

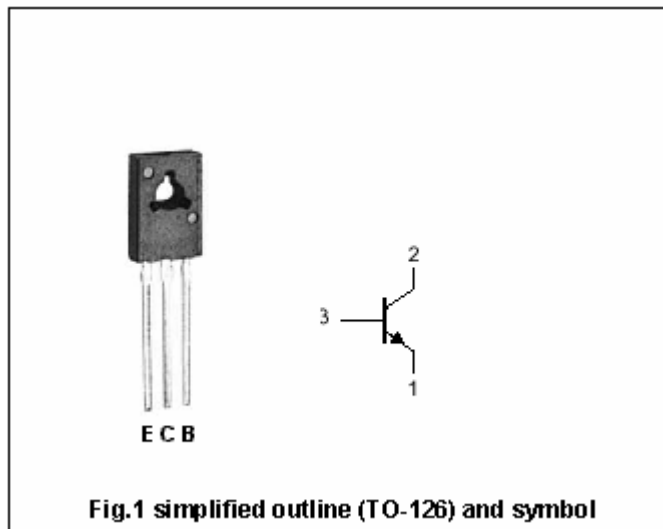
- With TO-126 package
- Complement to type 2SA1217
- Good linearity of  $h_{FE}$

**APPLICATIONS**

- Audio frequency power amplifier
- Low speed switching
- Suitable for output stage of 5 watts car radio and car stereo

**PINNING**

PIN	DESCRIPTION
1	Emitter
2	Collector;connected to mounting base
3	Base



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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	40	V
$V_{CEO}$	Collector-emitter voltage	Open base	40	V
$V_{EBO}$	Emitter-base voltage	Open collector	5	V
$I_C$	Collector current		3	A
$I_B$	Base current		1	A
$P_D$	Total power dissipation	$T_C=25^\circ C$	10	W
$T_j$	Junction temperature		150	$^\circ C$
$T_{stg}$	Storage temperature		-55~150	$^\circ C$

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## CHARACTERISTICS

Tj=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	$I_C=2.0A ; I_B=0.2A$			0.8	V
$V_{BE}$	Base-emitter on voltage	$I_C=0.5A ; V_{CE}=2V$			1.0	V
$I_{CBO}$	Collector cut-off current	$V_{CB}=40V ; I_E=0$			0.1	$\mu A$
$I_{EBO}$	Emitter cut-off current	$V_{EB}=5V ; I_C=0$			0.1	$\mu A$
$h_{FE-1}$	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			
$f_T$	Transition frequency	$I_C=0.5A ; V_{CE}=2V$		100		MHz

◆  $h_{FE-1}$  Classifications

O	Y
80-160	120-240

PACKAGE OUTLINE

