

Silicon NPN Power Transistors

MJW16206

DESCRIPTION

- With TO-247 package
- High voltage ,high speed
- Low collector saturation voltage

APPLICATIONS

- Designed for use in horizontal deflection circuits for high and very high resolution, monochrome and color CRT monitors

PINNING

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

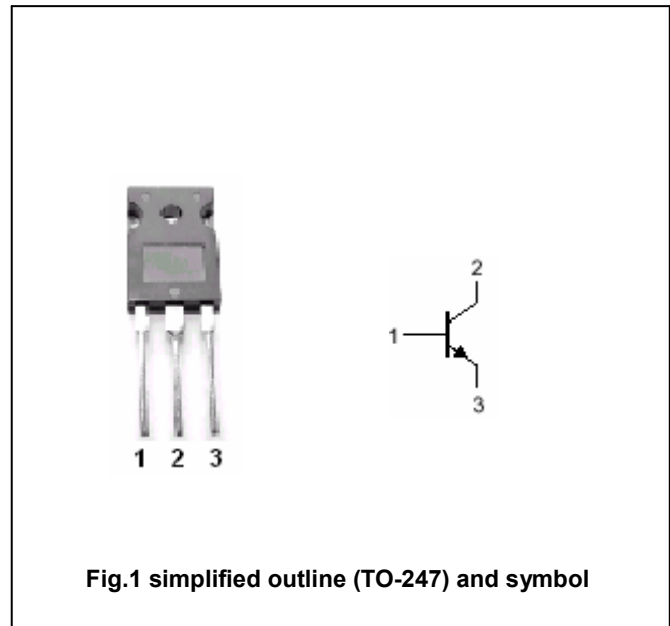


Fig.1 simplified outline (TO-247) and symbol

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	1200	V
V_{CEO}	Collector-emitter voltage	Open base	500	V
V_{EBO}	Emitter-base voltage	Open collector	8	V
I_C	Collector current		12	A
I_{CM}	Collector current-peak		15	A
I_B	Base current		5.0	A
I_{BM}	Base current-peak		10	A
P_D	Total power dissipation	$T_c=25^\circ\text{C}$ $T_c=100^\circ\text{C}$	150 39	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j-c}$	Thermal resistance junction to case	0.67	$^\circ\text{C}/\text{W}$

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(SUS)}	Collector-emitter sustaining voltage	I _C =10mA; I _B =0	500			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =1.0mA; I _C =0	8			V
V _{CE(sat)-1}	Collector-emitter saturation voltage	I _C =3A; I _B =0.4A			1.0	V
V _{CE(sat)-2}	Collector-emitter saturation voltage	I _C =6.5A; I _B =1.5A			1.0	V
V _{BE(sat)}	Base-emitter saturation voltage	I _C =6.5A; I _B =1.5A			1.5	V
I _{CES}	Collector cut-off current	V _{CE} =1200V, V _{BE} =0 V _{CE} =850V, V _{BE} =0			250 25	μA
I _{EBO}	Emitter cut-off current	V _{EB} =8V; I _C =0			25	μA
h _{FE-1}	DC current gain	I _C =1A; V _{CE} =5V		24		
h _{FE-2}	DC current gain	I _C =10A; V _{CE} =5V	5		13	
h _{FE-3}	DC current gain	I _C =12A; V _{CE} =5V	3			
f _T	Transition frequency	I _C =0.5A; V _{CE} =10V; f=1.0MHz		3.0		MHz
C _{OB}	Collector outoput capacitance	I _E =0; f=100kHz; V _{CB} =10V			350	pF

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PACKAGE OUTLINE

