

Silicon NPN Power Transistors

MJW16206

DESCRIPTION

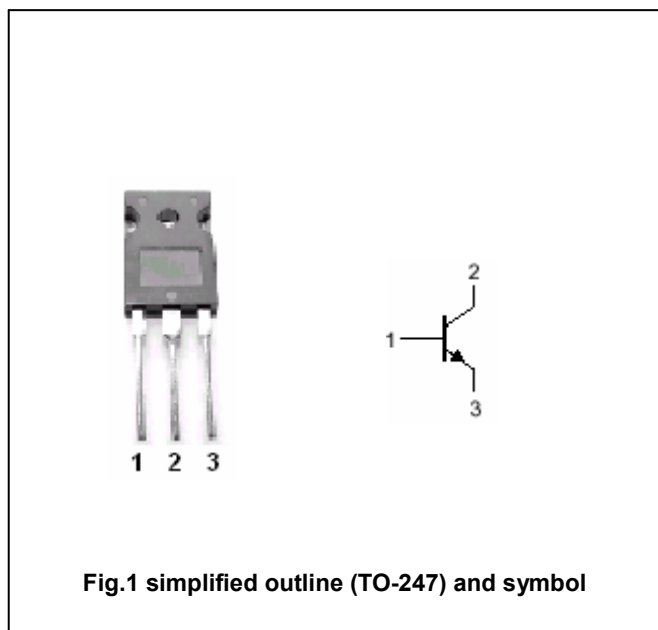
- With TO-247 package
- High voltage ,high speed
- Low collector saturation voltage

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

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

Tj=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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