Silicon NPN Power Transistors 2N6486 2N6487 2N6488

DESCRIPTION

- With TO-220 package
- Excellent safe operating area
- Complement to type 2N6489 2N6490 2N6491 respectively

APPLICATIONS

- Power amplifier and medium speed switching applications

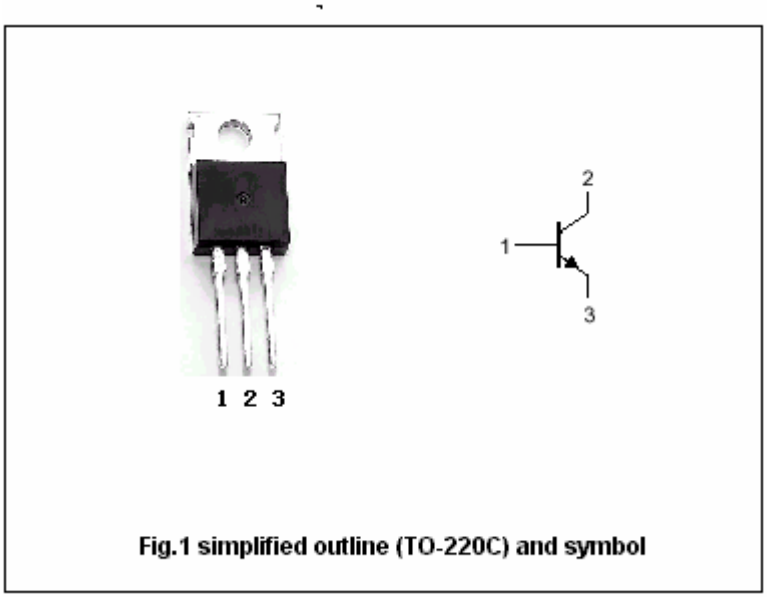

Fig.1 simplified outline (TO-220C) and symbol

PINNING

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

Absolute maximum ratings(Ta=25℃)

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	2N6486	Open emitter	50	V
		2N6487		70	
		2N6488		90	
V_{CEO}	Collector-emitter voltage	2N6486	Open base	40	V
		2N6487		60	
		2N6488		80	
V_{EBO}	Emitter-base voltage		Open collector	5	V
I_C	Collector current			15	A
I_B	Base current			5	A
P_T	Total power dissipation		T_C=25℃	75	W
T_j	Junction temperature			150	℃
T_{stg}	Storage temperature			-65~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal resistance from junction to case	1.67	℃/W

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CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	2N6486	I_C=0.2A ;I_B=0	40			V
		2N6487		60			
		2N6488		80			
$V_{CEsat-1}$	Collector-emitter saturation voltage		I_C=5A;I_B=0.5A			1.3	V
$V_{CEsat-2}$	Collector-emitter saturation voltage		I_C=15A;I_B=5A			3.5	V
V_{BE-1}	Base-emitter on voltage		I_C=5A ; V_{CE}=4V			1.3	V
V_{BE-2}	Base-emitter on voltage		I_C=15A ; V_{CE}=4V			3.5	V
I_{CEX}	Collector cut-off current V_{BE}=-1.5V	2N6486	V_{CE}=45V; V_{CE}=40V;T_C=150℃			0.5 5.0	mA
		2N6487	V_{CE}=65V; V_{CE}=60V;T_C=150℃			0.5 5.0	
		2N6488	V_{CE}=85V; V_{CE}=80V;T_C=150℃			0.5 5.0	
I_{CEO}	Collector cut-off current	2N6486	V_{CE}=20V;I_B=0			1.0	mA
		2N6487	V_{CE}=30V;I_B=0				
		2N6488	V_{CE}=40V;I_B=0				
I_{EBO}	Emitter cut-off current		V_{EB}=5V; I_C=0			1.0	mA
h_{FE-1}	DC current gain		I_C=5A ; V_{CE}=4V	20		150	
h_{FE-2}	DC current gain		I_C=15A ; V_{CE}=4V	5			

PACKAGE OUTLINE

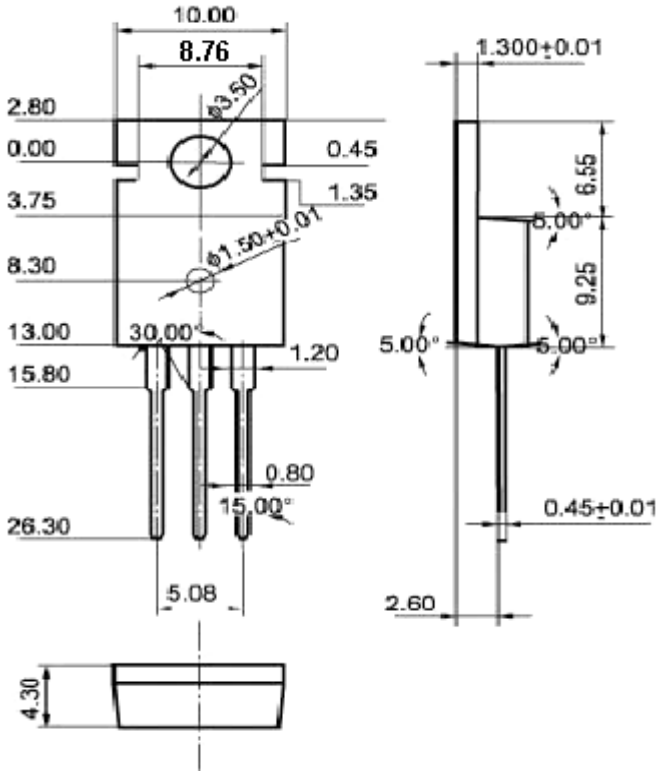

Fig.2 Outline dimensions(unindicated tolerance:±0.10 mm)