Silicon NPN Darlington Power Transistors 2SD2561

DESCRIPTION

- With MT-200 package
- Complement to type 2SB1648

APPLICATIONS

- Audio ,series regulator and general purpose

PINNING

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

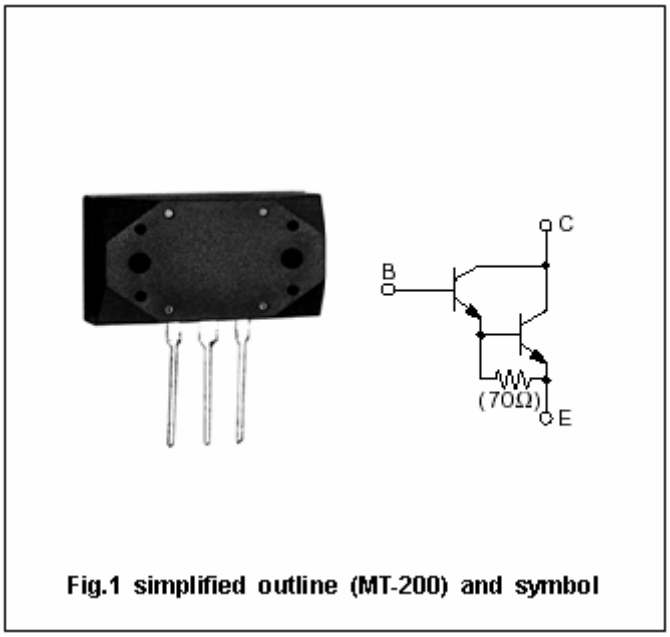

Fig.1 simplified outline (MT-200) and symbol

ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	150	V
V_{CEO}	Collector-emitter voltage	Open base	150	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		17	A
I_B	Base current		1	A
P_C	Collector power dissipation	T_C=25℃	200	W
T_j	Junction temperature		150	℃
T_{stg}	Storage temperature		-55~150	℃

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CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	I_C=30mA ;I_B=0	150			V
$V_{CE(sat)}$	Collector-emitter saturation voltage	I_C=10A ;I_B=10mA			2.5	V
$V_{BE(sat)}$	Base-emitter saturation voltage	I_C=10A ;I_B=10mA			3.0	V
I_{CBO}	Collector cut-off current	V_{CB}=150V ;I_E=0			100	μA
I_{EBO}	Emitter cut-off current	V_{EB}=5V; I_C=0			100	μA
h_{FE}	DC current gain	I_C=10A ; V_{CE}=4V	5000			
C_{ob}	Output capacitance	I_E=0 ; V_{CB}=10V;f=1MHz		120		pF
f_T	Transition frequency	I_E=-2A ; V_{CE}=12V		70		MHz

Switching times

t_{on}	Turn-on time	I_C=10A;R_L=4Ω I_{B1}=-I_{B2}=10mA V_{CC}=40V		0.8		μs
t_s	Storage time			4.0		μs
t_f	Fall time			1.2		μs

◆ h_{FE} Classifications

O	P	Y
5000-12000	6500-20000	15000-30000

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PACKAGE OUTLINE

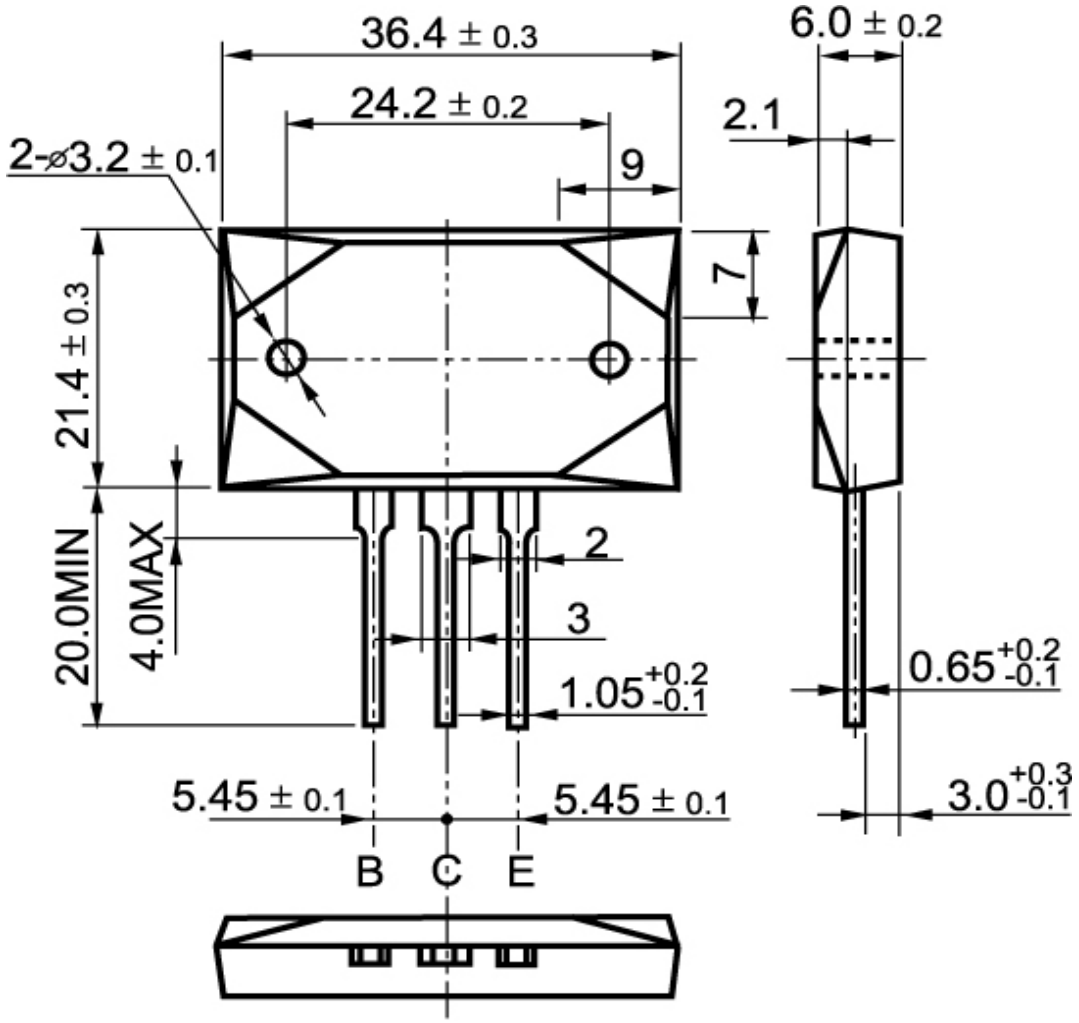

Fig.2 outline dimensions