

Silicon NPN Power Transistors

2SD560

DESCRIPTION

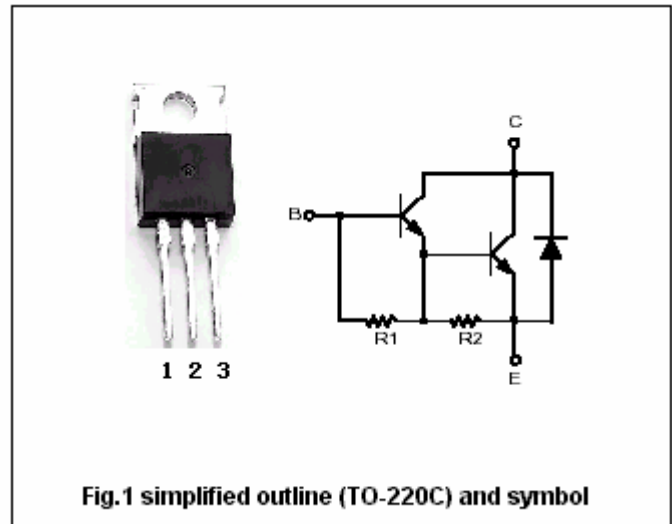
- With TO-220C package
- Complement to type 2SB601
- DARLINGTON

APPLICATIONS

- Low frequency power amplifier
- Low speed switching industrial use

PINNING

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

Absolute maximum ratings($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	150	V
V_{CEO}	Collector-emitter voltage	Open base	100	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current (DC)		5	A
I_{CM}	Collector current-Peak		8	A
I_B	Base current		0.5	A
P_C	Collector dissipation	$T_C=25$	30	W
			1.5	
T_j	Junction temperature		150	
T_{stg}	Storage temperature		-50~150	

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CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =30mA; I _B =0	100			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =3A; I _B =3mA			1.5	V
V _{BEsat}	Base-emitter saturation voltage	I _C =3A; I _B =3mA			2.0	V
I _{CBO}	Collector cut-off current	V _{CB} =100V; I _E =0			1	μA
I _{EBO}	Emitter cut-off current	V _{EB} =5V; I _C =0			3	mA
h _{FE-1}	DC current gain	I _C =3A; V _{CE} =2V	2000	6000	15000	
h _{FE-2}	DC current gain	I _C =5A; V _{CE} =2V	500			

Switching times

t _{on}	Turn-on time	I _C =3A; I _{B1} =-I _{B2} =3mA V _{CC} =50V; R _L =16.7	1.0			μs
t _s	Storage time		3.5			μs
t _f	Fall time		1.2			μs

◆ h_{FE-1} Classifications

R	O	Y
2000-5000	3000-7000	5000-15000

