

Silicon NPN Power Transistors

2SD1163,2SD1163A

DESCRIPTION

h TO-220 package

·Low collector saturation voltage

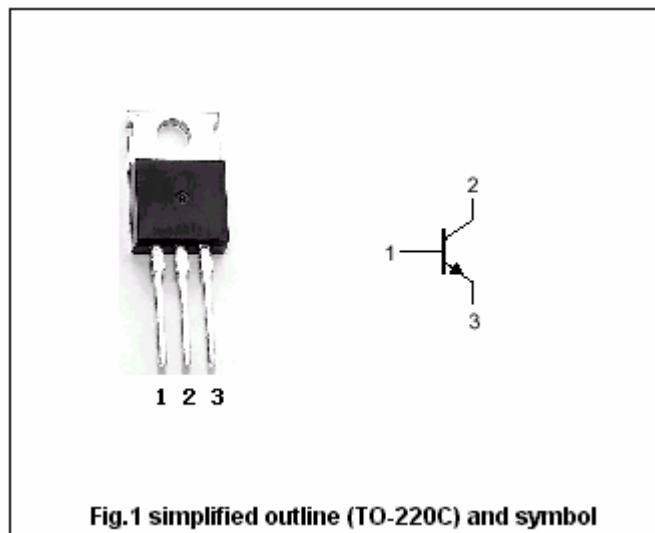
APPLICATIONS

·TV horizontal deflection output,

·Wit

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	2SD1163	Open emitter	300	V
		2SD1163A		350	
V_{CEO}	Collector-emitter voltage	2SD1163	Open base	120	V
		2SD1163A		150	
V_{EBO}	Emitter-base voltage		Open collector	6	V
I_C	Collector current			7	A
I_{CM}	Collector current-peak			10	A
$I_{C(surge)}$	Collector current-surge			20	A
P_C	Collector power dissipation		$T_C=25^{\circ}\text{C}$	40	W
T_j	Junction temperature			150	$^{\circ}\text{C}$
T_{stg}	Storage temperature			-55~150	$^{\circ}\text{C}$

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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	2SD1163	I _C =10mA ; R _{BE} =∞	120			V
		2SD1163A		150			
V _{(BR)EBO}	Emitter-base breakdown voltage		I _E =10mA ; I _C =0	6			V
V _{CEsat}	Collector-emitter saturation voltage	2SD1163	I _C =5A, I _B =0.5A			2.0	V
		2SD1163A				1.0	
V _{BEsat}	Base-emitter saturation voltage		I _C =5A, I _B =0.5A			1.2	V
I _{CBO}	Collector cut-off current	2SD1163	V _{CB} =300V; I _E =0			5	mA
		2SD1163A	V _{CB} =350V; I _E =0			5	mA
h _{FE}	DC current gain		I _C =5A ; V _{CE} =5V	25			

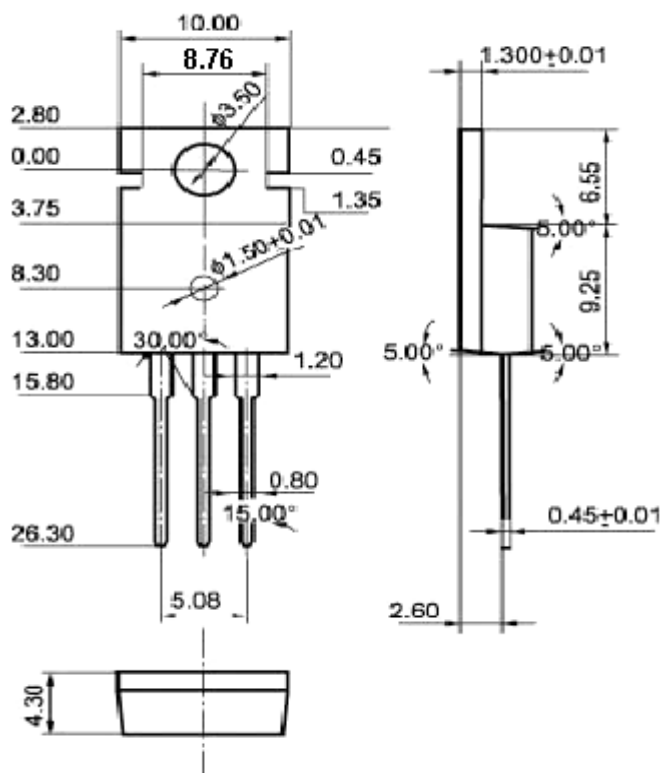
Switching times

t _f	Fall time	I _{CM} =3.5A; I _{B1} =0.45A			0.5	μs
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PACKAGE OUTLINE

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