Silicon NPN Power Transistors 2SD2017

DESCRIPTION

・With TO-220F package
・DARLINGTON

APPLICATIONS

・Driver for solenoid,relay and motor and general purpose applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

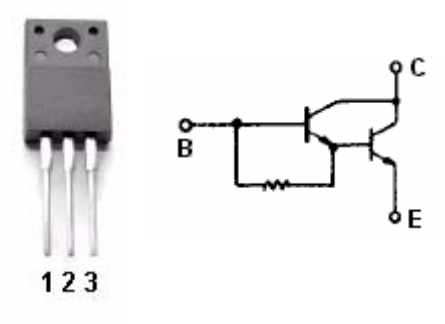

Fig.1 simplified outline (TO-220F) and symbol

Absolute maximum ratings (Ta=25℃)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	300	V
V_{CEO}	Collector-emitter voltage	Open base	250	V
V_{EBO}	Emitter-base voltage	Open collector	20	V
I_C	Collector current		6	A
I_B	Base current		1	A
P_C	Collector dissipation	T_C=25℃	35	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=25mA ;I_B=0	250			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=2A ;I_B=2mA			1.5	V
V_{BEsat}	Base-emitter saturation voltage	I_C=2A ;I_B=2mA			2.0	V
I_{CBO}	Collector cut-off current	V_{CB}=300V; I_E=0			100	μA
I_{EBO}	Emitter cut-off current	V_{EB}=20V; I_C=0			10	mA
h_{FE}	DC current gain	I_C=2A ; V_{CE}=2V	2000			
f_T	Transition frequency	I_E=-1A ; V_{CE}=12V		20		MHz
C_{OB}	Collector output capacitance	f=1MHz;V_{CB}=10V		65		pF
Switching times						
t_{on}	Turn-on time	I_C=2.0A ;I_{B1}=5mA;I_{B2}=-10mA V_{CC}=100V ,R_L=50Ω		0.6		μs
t_s	Storage time			16.0		μs
t_f	Fall time			3.0		μs

PACKAGE OUTLINE

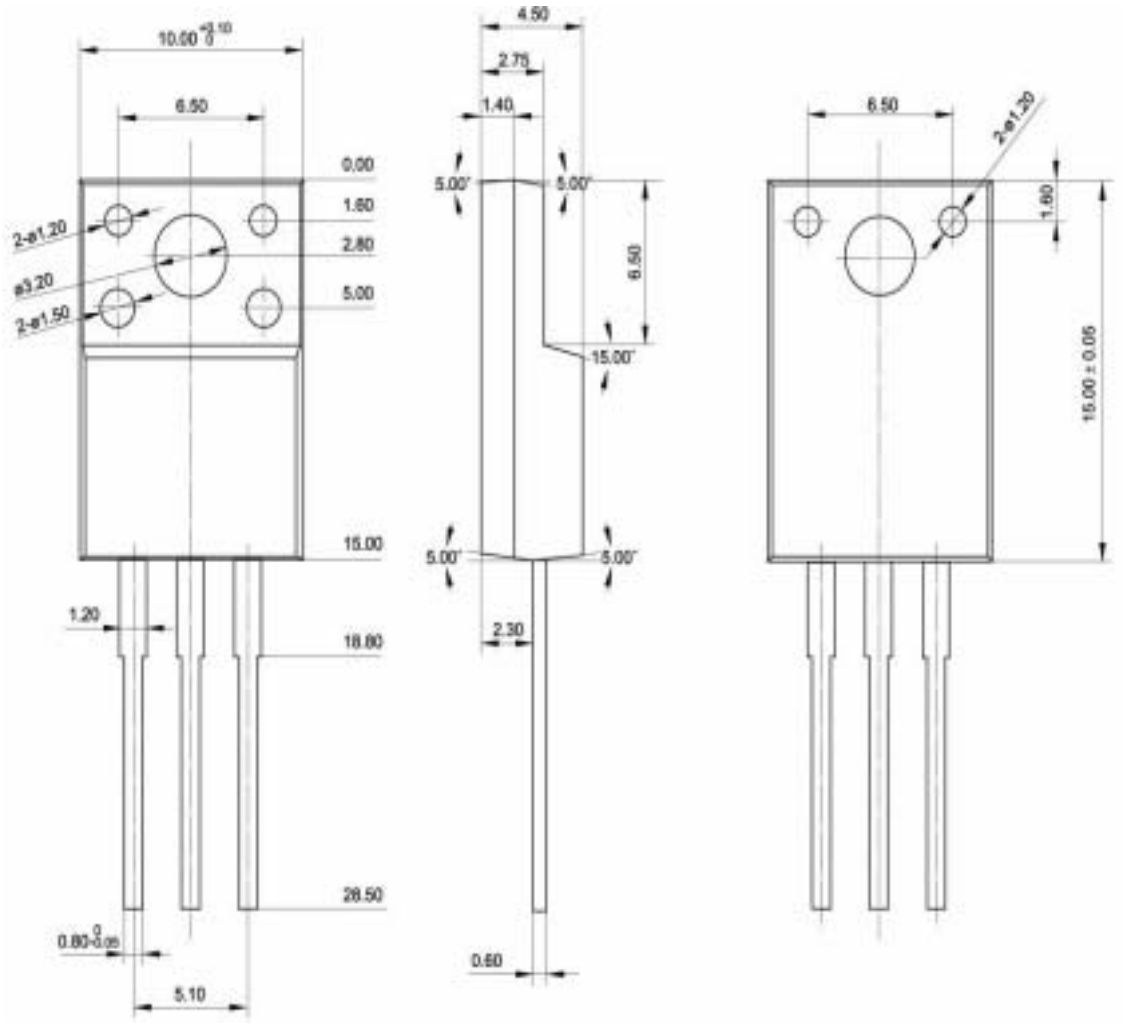

Fig.2 Outline dimensions