Silicon NPN Power Transistors MJF122

DESCRIPTION

·With TO-220F package
·DARLINGTON
·High DC current gain
·Low collector saturation voltage
·Complement to type MJF127

APPLICATIONS

·Designed for general–purpose amplifier and switching applications.

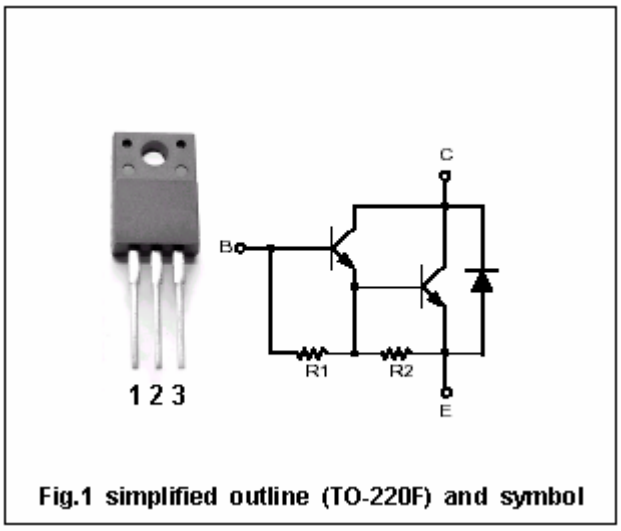

Fig.1 simplified outline (TO-220F) and symbol

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

ABSOLUTE MAXIMUM RATINGS(T_C=25□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	100	V
V_{CEO}	Collector-emitter voltage	Open base	100	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current-DC		5	A
I_{CM}	Collector current-Pulse		8	A
I_B	Base current-DC		120	mA
P_C	Collector power dissipation	T_C=25□	30	W
		T_a=25□	2	
T_j	Junction temperature		150	□
T_{stg}	Storage temperature		-65~150	□

CHARACTERISTICS

Tj=25□ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	I_C=0.1A, I_B=0	100			V
$V_{CE(sat)-1}$	Collector-emitter saturation voltage	I_C=3A ,I_B=12mA			2.0	V
$V_{CE(sat)-2}$	Collector-emitter saturation voltage	I_C=5A ,I_B=20mA			3.5	V
V_{BE}	Base-emitter on voltage	I_C=3.0A ; V_{CE}=3V			2.5	V
I_{CBO}	Collector cut-off current	V_{CB}=100V, I_E=0			10	μA
I_{CEO}	Collector cut-off current	V_{CE}=50V, I_B=0			10	μA
I_{EBO}	Emitter cut-off current	V_{EB}=5V; I_C=0			2.0	mA
h_{FE-1}	DC current gain	I_C=0.5A ; V_{CE}=3V	1000			
h_{FE-2}	DC current gain	I_C=3.0A ; V_{CE}=3V	2000			
C_{OB}	Output capacitance	I_E=0 ; V_{CB}=10V,f=0.1MHz			200	pF

PACKAGE OUTLINE

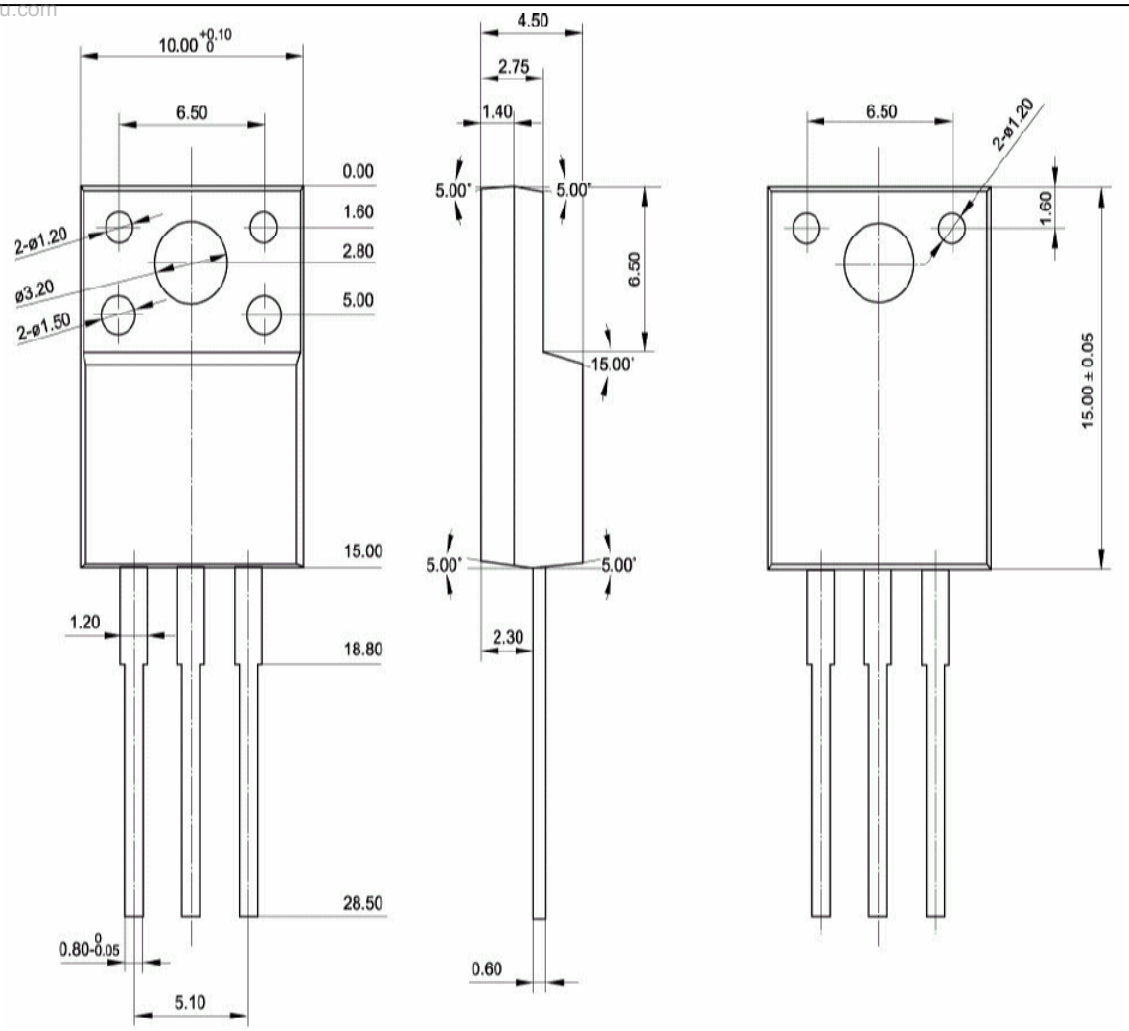

Fig.2 Outline dimensions