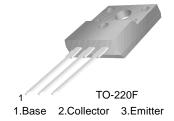


FJPF3835

Power Amplifier

- High Current Capability: I_C=8A
 High Power Dissipation
 Wide S.O.A



NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings $\rm T_{C} = 25^{\circ}C$ unless otherwise noted

Symbol	Parameter	Value	Units
V _{CBO}	Collector-Base Voltage	200	V
V _{CEO}	Collector-Emitter Voltage	120	V
V _{EBO}	Emitter-Base Voltage	8	V
I _C	Collector Current (DC)	8	Α
I _{CP}	Collector Current (Pulse)	16	Α
P _C	Collector Dissipation (T _C =25°C)	30	W
TJ	Junction Temperature	150	°C
T _{STG}	Storage Temperature	- 55 ~ 150	°C

Electrical Characteristics $T_C=25$ °C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
BV _{CBO}	Collector-Base Breakdown Voltage	I _C =5mA, I _E =0	200			V
BV _{CEO}	Collector-Emitter Breakdown Voltage	I _C =10mA, R _{BE} =∞	120			V
BV _{EBO}	Emitter-Base Breakdown Voltage	I _E =5mA, I _C =0	8			V
I _{CBO}	Collector Cut-off Current	V _{CB} =80V, I _E =0			0.1	mA
I _{EBO}	Emitter Cut-off Current	V_{EB} =4V, I_{C} =0			0.1	mA
h _{FE}	* DC Current Gain	V _{CE} =4V, I _C =3A	120		250	
V _{CE} (sat)	Collector-Emitter Saturation Voltage	I _C =3A, I _B =0.3A			0.5	V
V _{BE} (sat)	Base-Emitter On Voltage	I _C =3A, I _B =0.3A			1.2	V
f _T	Current Gain Bandwidth Product	V _{CE} =5V, I _C =1A		30		MHz
C _{ob}	Output Capacitance	V _{CB} =10V, f=1MHz		210		pF
t _{ON}	Turn On Time	V _{CC} =20V,		0.26		μs
t _F	Fall Time	I _C =1A=10I _{B1} =-10I _{B2}		0.68		μs
t _{STG}	Storage Time	$R_L=20\Omega$		6.68		μs

* Pulse Test : PW=20µs

Typical Characteristics

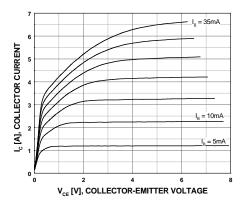


Figure 1. Static Characterstic

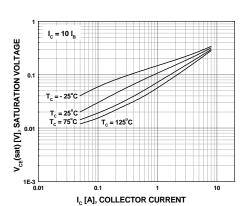


Figure 3. Collector-Emitter Saturation Voltage

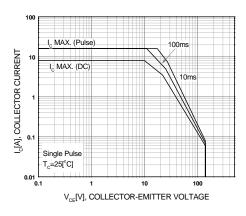


Figure 5. Safe Operating Area

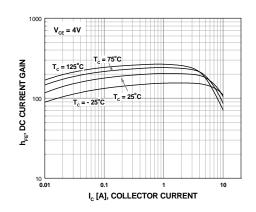


Figure 2. DC current Gain

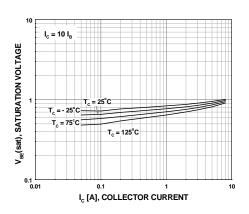


Figure 4. Base-Emitter Saturation Voltage

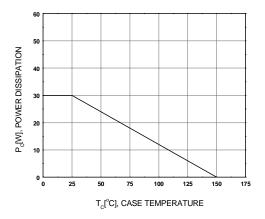
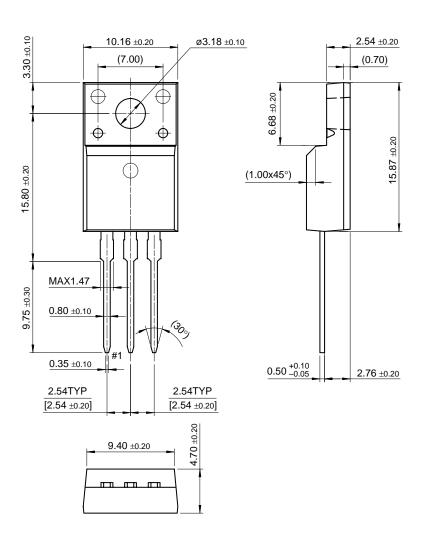


Figure 6. Power Derating

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Package Dimensions

TO-220F



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CoolFETT	М	FPS™	MICROCOUPLER™	PowerSaver™	SuperSOT™-3
CROSSV	OLT^{TM}	FRFET™	MicroFET™	PowerTrench [®]	SuperSOT™-6
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E ² CMOS ^T	М	HiSeC™	MSX™	QT Optoelectronics™	TinyLogic [®]
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The Power Franchise®		OPTOLOGIC [®]	SILENT SWITCHER®	UltraFET [®]	
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