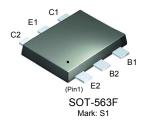


FJYF2906

PNP Multi-Chip General Purpose Amplifier

- Collector-Emitter Voltage: V_{CEO} = 40V
 Amplifier and Switching Application
- E2 is on pin 1



Absolute Maximum Ratings T_A=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V _{CEO}	Collector-Emitter Voltage	40	V
V _{CBO}	Collector-Base Voltage	40	V
V _{EBO}	Emitter-Base Voltage	5	V
I _C	Collector Current - Continuous	150	mA
T _J , T _{STG}	Operating and Storage Junction Temperature Range	-55 ~ +150	°C

$\textbf{Electrical Characteristics} \ \, \textbf{T}_{A} \text{=} 25^{\circ} \textbf{C} \ \, \text{unless otherwise noted}$

Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
Off Characte	eristics	·	•	•		•
BV _{CEO}	Collector-Emitter Breakdown Voltage	I _C = 1MA, I _B = 0	40			V
BV _{CBO}	Collector-Base Breakdown Voltage	$I_{C} = 10 \mu A, I_{E} = 0$	40			V
BV _{EBO}	Emitter-Base Breakdown Voltage	$I_E = 10 \mu A, I_C = 0$	5			V
I _{CEX}	Collector Cut-off Current	V _{CE} = 30V, V _{BE} = 3V			50	NА
On Characte	eristics	·		•		•
h _{FE}	DC Current Gain *	$V_{CE} = 1V$, $I_{C} = 0.1$ MA $V_{CE} = 1V$, $I_{C} = 1$ mA $V_{CE} = 1V$, $I_{C} = 10$ mA $V_{CE} = 1V$, $I_{C} = 50$ mA $V_{CE} = 1V$, $I_{C} = 100$ mA	60 80 100 60 30		300	
V _{CE} (sat)	Collector-Emitter Saturation Voltage	$I_C = 10$ mA, $I_B = 1$ mA $I_C = 50$ mA, $I_B = 5$ mA			0.3 0.5	V V
V _{BE} (sat)	Base-Emitter Saturation Voltage	I _C = 10mA, I _B = 1mA I _C = 50mA, I _B = 5mA	0.65		0.95 1	V V
Small Signa	I Characteristics	·		•		•
f _T	Current gain Bandwidth Product	V _{CE} = 20V, I _C = 10mA 250 f = 100MHz			MHz	
C _{obo}	Output Capacitance	V _{CB} = 5V, I _E = 0, f = 1MHz			4.5	pF
C _{ibo}	Input Capacitance	V _{EB} = 0.5V, I _C = 0, f = 1MHz			10	pF

^{*} Pulse Test: Pulse Width ≤ 300ms, Duty Cycle ≤ 2.0%

NOTE: All voltage (V) and currents (A) are negative for PNP transistors.

Thermal Characteristics T _A =25°C unless otherwise noted				
Symbol	Parameter	FJYF2906	Units	
P _D	Total Device Dissipation	150	mW	
_	Derate above 25°C	1.2	mW/°C	
$R_{ heta JA}$	Thermal Resistance, Junction to Ambient	833	°C/W	

Typical Characteristics

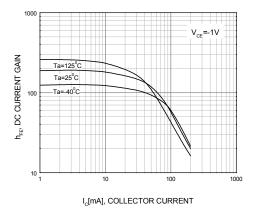


Figure 1. DC current Gain

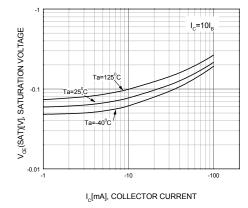


Figure 2. Collector-Emitter Saturation Voltage

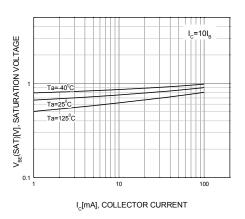


Figure 3. Base-Emitter Saturation Voltage

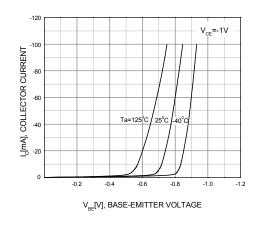


Figure 4. Base-Emitter On Voltage

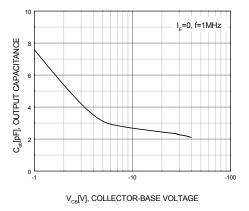
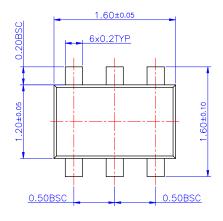


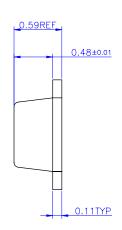
Figure 5. Collector Output Capacitance

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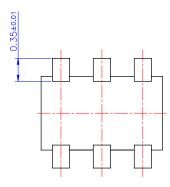
Package Dimensions

SOT-563F









Dimensions in Millimeters

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CoolFET™	FASTr™	MicroFET™	PowerTrench®	SuperSOT™-6
$CROSSVOLT^{\text{TM}}$	FRFET™	MicroPak™	QFET™	SuperSOT™-8
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EcoSPARK™	GTO™	MSX™	QT Optoelectronics™	TinyLogic™
E ² CMOS™	HiSeC™	MSXPro™	Quiet Series™	TruTranslation™
EnSigna™	I ² C™	OCX™	RapidConfigure™	UHC™
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Programmable Active Droop™		OPTOPLANAR™	SMART START™	

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