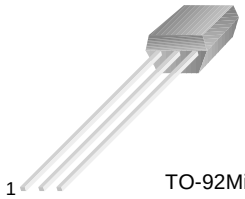
FAIRCHILD
SEMICONDUCTOR®

FJNS7565

For Output Amplifier of Electronic Flash Unit

- Low Collector-Emitter Saturation Voltage
- High Performance at Low Supply Voltage



TO-92Mini

1.Emitter 2. Collector 3. Base

NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings T_C=25°C unless otherwise noted

Symbol	Parameter	Ratings	Units
V_{CBO}	Collector-Base Voltage	15	V
V_{CEO}	Collector-Emitter Voltage	10	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current	5	A
P_C	Collector Dissipation	0.55	W
T_J	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.	Typ.	Max.	Units
BV_{CBO}	Collector-Base Voltage	I_C = 10μA, I_E = 0	15			V
BV_{CEO}	Collector-Emitter Voltage	I_C = 1mA, I_B = 0	10			V
BV_{EBO}	Emitter Base Voltage	I_C = 10μA, I_C = 0	7			V
I_{CBO}	Collector Cut-off Current	V_{CB} = 15V, I_E = 0			100	nA
I_{EBO}	Emitter Cut-off Current	V_{EB} = 5V, I_C = 0			100	nA
h_{FE1} h_{FE2} h_{FE3}	DC Current Gain	V_{CE} = 2V, I_C = 0.5A V_{CE} = 2V, I_C = 2A V_{CE} = 2V, I_C = 5A	450 300 150		800	
V_{CE} (sat)	Collector-Emitter Saturation Voltage	I_C = 3A, I_B = 60mA			0.45	V
V_{BE} (sat)	Base-Emitter Saturation Voltage	I_C = 3A, I_B = 60mA			1.5	V
C_{ob}	Collector Output Capacitance	V_{CB} = 20V, I_E = 0, f = 1MHz		20		pF

Typical Characteristics

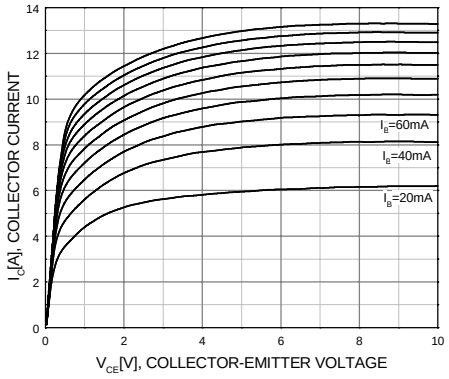


Figure 1. Static Characteristic

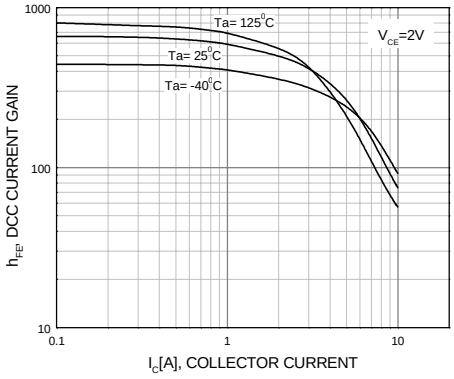


Figure 2. DC Current Gain

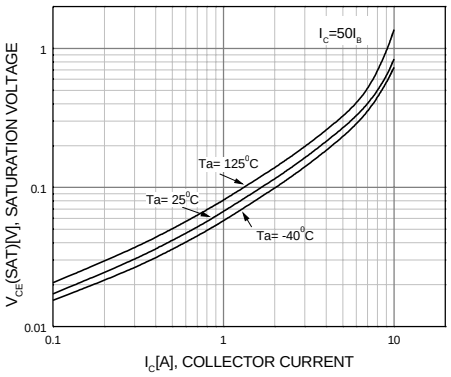


Figure 3. Collector-Emitter Saturation Voltage

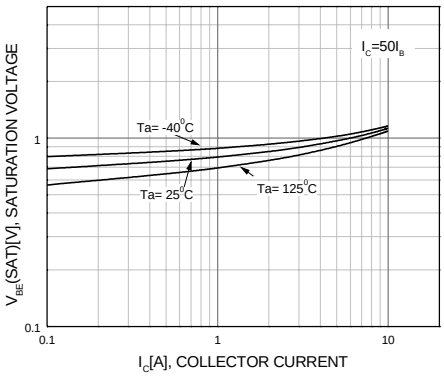


Figure 4. Base-Emitter Saturation Voltage

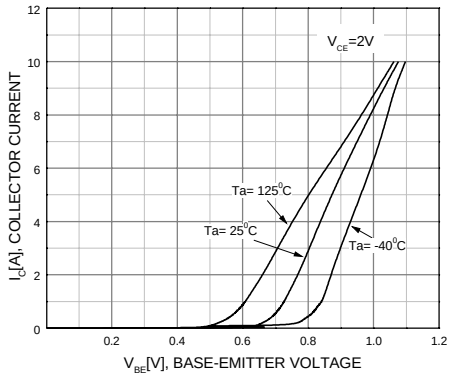


Figure 5. Base-Emitter On Voltage

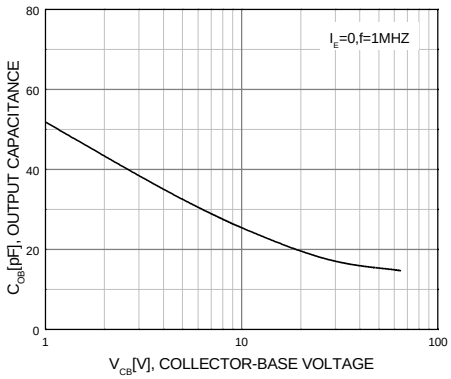
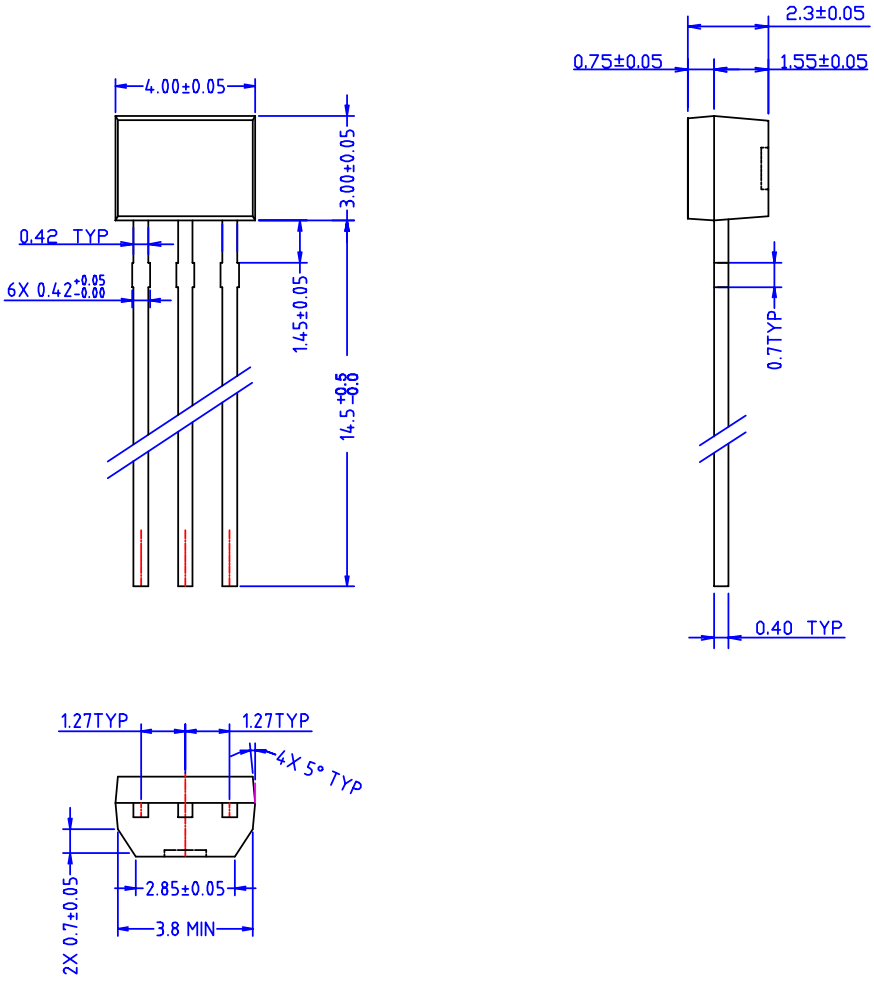


Figure 6. Collector Output Capacitance

Package Dimensions

TO-92Mini



Dimensions in Millimeters

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CoolFET™	FASTr™	MicroFET™	PowerTrench®	SuperSOT™-6
CROSSVOLT™	FRFET™	MicroPak™	QFET™	SuperSOT™-8
DOME™	GlobalOptoisolator™	MICROWIRE™	QS™	SyncFET™
EcoSPARK™	GTO™	MSX™	QT Optoelectronics™	TinyLogic®
E^2CMOS™	HiSeC™	MSXPro™	Quiet Series™	TruTranslation™
EnSigna™	I^2C™	OCX™	RapidConfigure™	UHC™
Across the board. Around the world.™		OCXPro™	RapidConnect™	UltraFET®
The Power Franchise™		OPTOLOGIC®	SILENT SWITCHER®	VCX™
Programmable Active Droop™		OPTOPLANAR™	SMART START™	

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