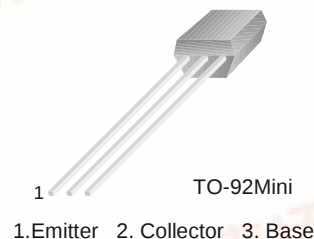




FJNS7565

For Output Amplifier of Electronic Flash Unit

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



NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings $T_C=25^{\circ}\text{C}$ 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	$^{\circ}\text{C}$
T_{STG}	Storage Temperature	-55 ~ 150	$^{\circ}\text{C}$

Electrical Characteristics $T_C=25^{\circ}\text{C}$ unless otherwise noted

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

Typical Characteristics

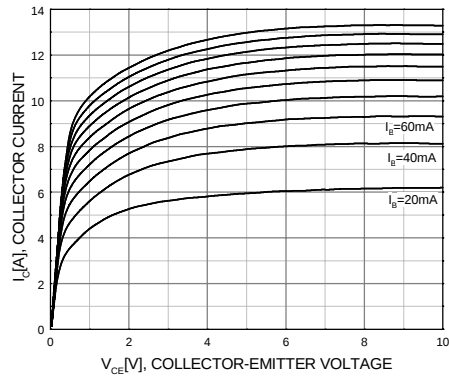


Figure 1. Static Characteristic

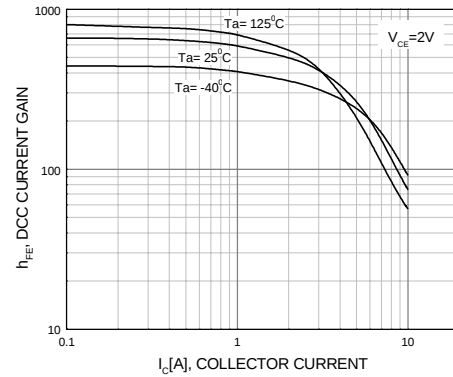


Figure 2. DC Current Gain

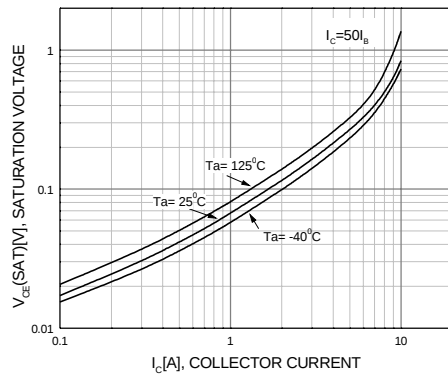


Figure 3. Collector-Emitter Saturation Voltage

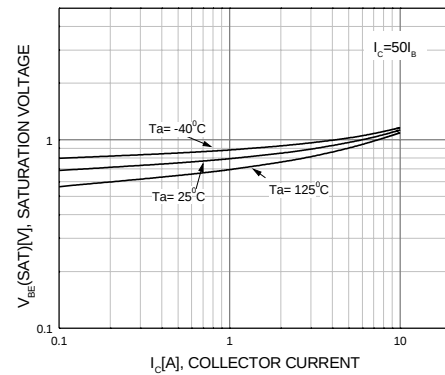


Figure 4. Base-Emitter Saturation Voltage

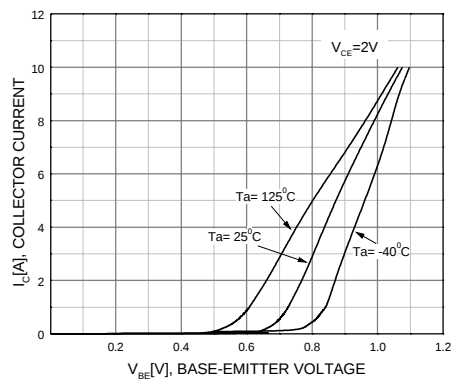


Figure 5. Base-Emitter On Voltage

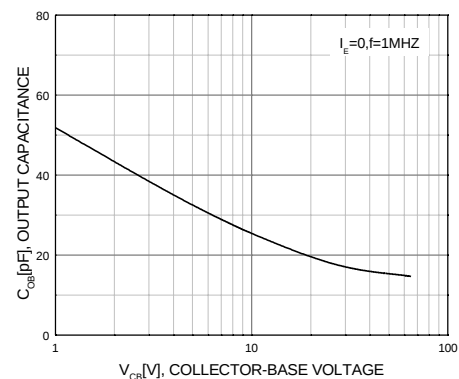
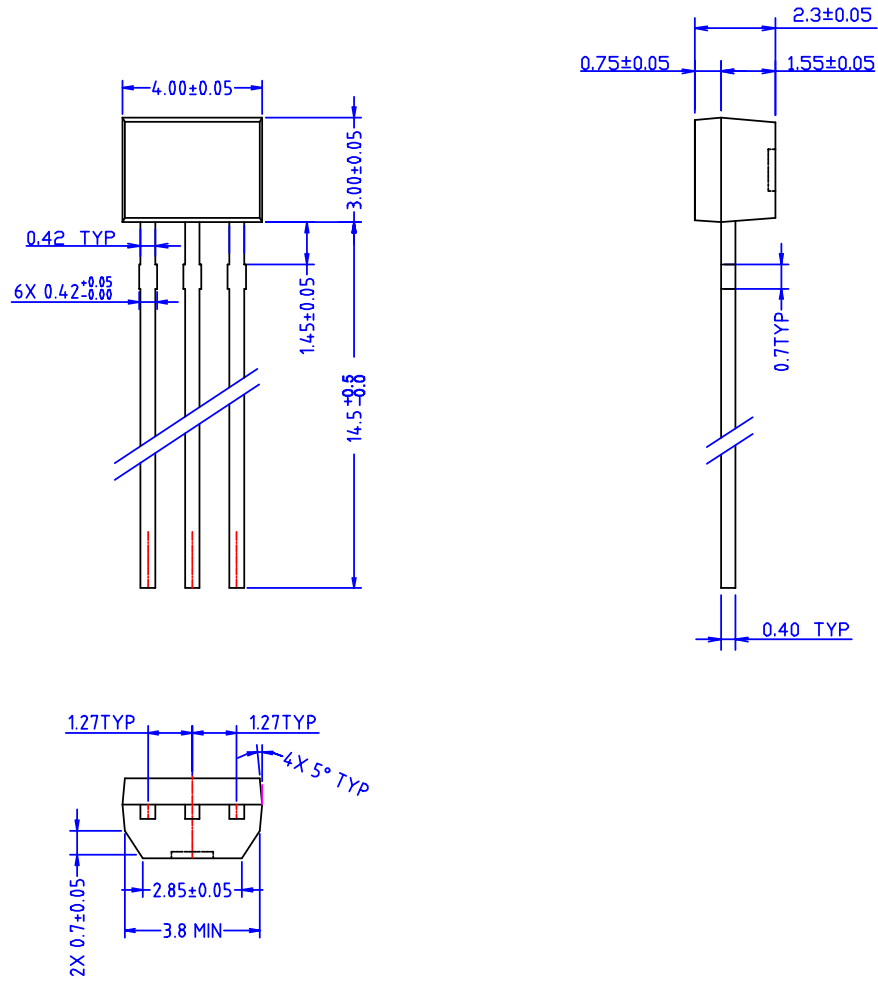


Figure 6. Collector Output Capacitance

Package Dimensions

TO-92Mini



Dimensions in Millimeters

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