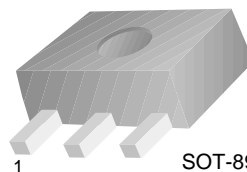


# FJC2098

## Camera Strobe Flash Application

- Complement to FJC1386
- High Collector Current
- Low Collector-Emitter Saturation Voltage



1. Base 2. Collector 3. Emitter

## NPN Epitaxial Silicon Transistor

### Absolute Maximum Ratings $T_C=25^\circ\text{C}$ unless otherwise noted

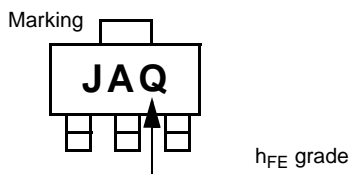
Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	50	V
$V_{CEO}$	Collector-Emitter Voltage	20	V
$V_{EBO}$	Emitter-Base Voltage	6	V
$I_C$	Collector Current (DC)	5	A
$P_C$	Power Dissipation ( $T_C=25^\circ\text{C}$ )	0.5	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{STG}$	Storage Temperature	- 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 Breakdown Voltage	$I_C=50\mu\text{A}, I_E=0$	50			V
$BV_{CEO}$	Collector-Emitter Breakdown Voltage	$I_C=1\text{mA}, I_B=0$	20			V
$BV_{EBO}$	Emitter-Base Breakdown Voltage	$I_E=50\mu\text{A}, I_C=0$	6			V
$I_{CEO}$	Collector Cut-off Current	$V_{CE}=40\text{V}, V_B=0$			0.5	$\mu\text{A}$
$I_{EBO}$	Emitter Cut-off Current	$V_{EB}=5\text{V}, I_C=0$			0.5	$\mu\text{A}$
$h_{FE}$	DC Current Gain	$V_{CE}=2\text{V}, I_C=0.5\text{A}$	120		390	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=4\text{A}, I_B=0.1\text{A}$			1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=4\text{A}, I_B=0.1\text{A}$			1.2	V
$C_{OB}$	Collector Output Capacitance	$V_{CB}=20\text{V}, I_E=0, f=1\text{MHz}$		23		pF

### $h_{FE}$ Classification

Classification	Q	R
$h_{FE}$	120 ~ 270	180 ~ 390



# Typical Characteristics

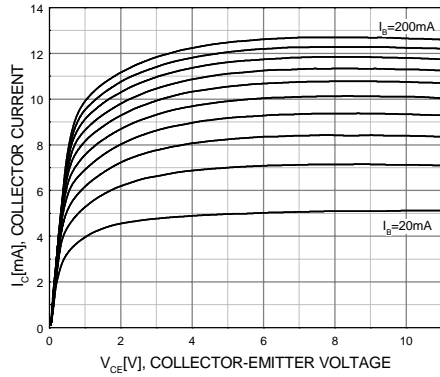


Figure 1. Static Characteristic

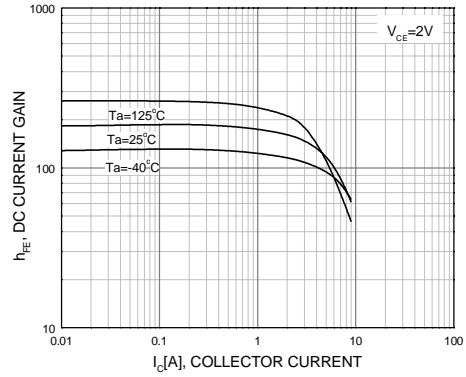


Figure 2. DC current Gain

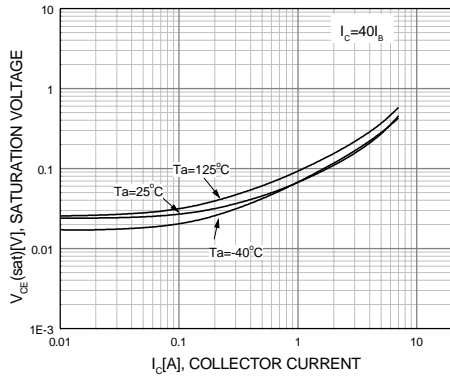


Figure 3. Collector-Emitter Saturation Voltage

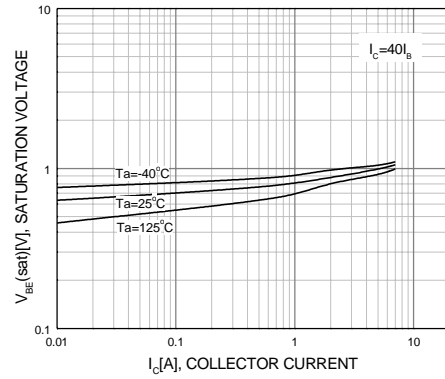


Figure 4. Base-Emitter Saturation Voltage

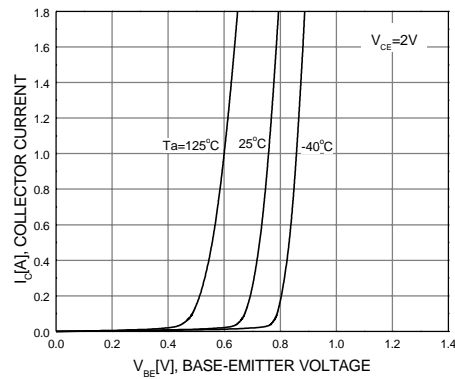


Figure 5. Base-Emitter On Voltage

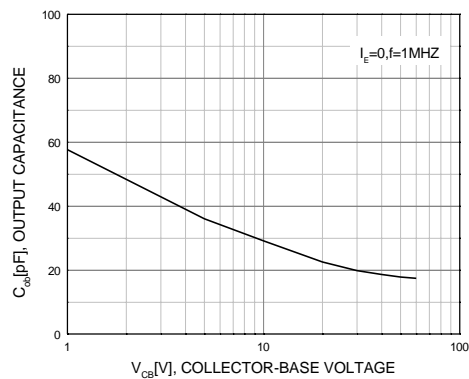
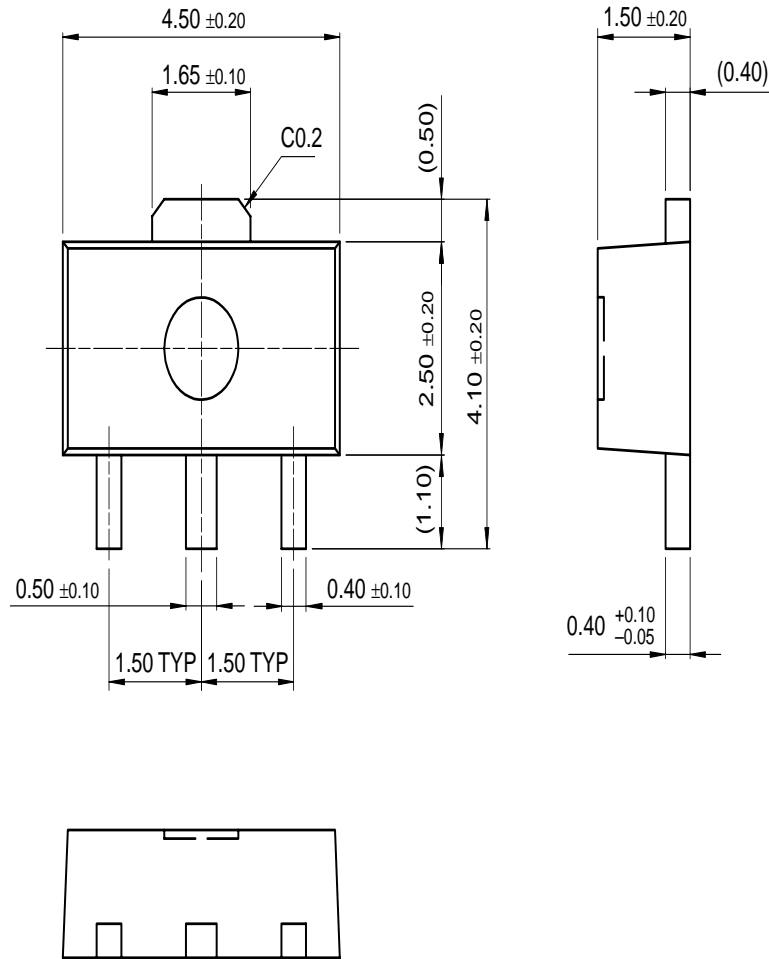


Figure 6. Common-Base Open-Circuit Output Capacitance

# Package Dimensions

## SOT-89



Dimensions in Millimeters

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Bottomless <sup>™</sup>	FAST <sup>®</sup>	LittleFET <sup>™</sup>	Power247 <sup>™</sup>	SuperSOT <sup>™</sup> -3
CoolFET <sup>™</sup>	FAST <sup>™</sup>	MicroFET <sup>™</sup>	PowerTrench <sup>®</sup>	SuperSOT <sup>™</sup> -6
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Programmable Active Droop <sup>™</sup>		OPTOPLANAR <sup>™</sup>	SMART START <sup>™</sup>	

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