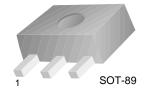


## **FJC2098**

### **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 $T_C=25^{\circ}C$ unless otherwise noted

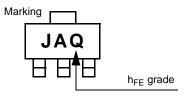
Symbol	Parameter	Value	Units
V <sub>CBO</sub>	Collector-Base Voltage	50	V
V <sub>CEO</sub>	Collector-Emitter Voltage	20	V
V <sub>EBO</sub>	Emitter-Base Voltage	6	V
I <sub>C</sub>	Collector Current (DC)	5	Α
P <sub>C</sub>	Power Dissipation(T <sub>C</sub> =25°C)	0.5	W
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>STG</sub>	Storage Temperature	- 55 ~ 150	°C

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

Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
BV <sub>CBO</sub>	Collector-Base Breakdown Voltage	$I_{C}=50\mu A, I_{E}=0$	50			V
BV <sub>CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> =1mA, I <sub>B</sub> =0	20			V
BV <sub>EBO</sub>	Emitter-Base Breakdown Voltage	$I_E=50\mu A, I_C=0$	6			V
I <sub>CEO</sub>	Collector Cut-off Current	$V_{CE}=40V, V_{B}=0$			0.5	μΑ
I <sub>EBO</sub>	Emitter Cut-off Current	$V_{EB}$ =5V, $I_C$ =0			0.5	μΑ
h <sub>FE</sub>	DC Current Gain	$V_{CE}$ =2V, $I_{C}$ =0.5A	120		390	
V <sub>CE</sub> (sat)	Collector-Emitter Saturation Voltage	I <sub>C</sub> =4A, I <sub>B</sub> =0.1A			1.0	V
V <sub>BE</sub> (sat)	Base-Emitter Saturation Voltage	I <sub>C</sub> =4A, I <sub>B</sub> =0.1A			1.2	V
C <sub>OB</sub>	Collector Output Capacitance	V <sub>CB</sub> =20V, I <sub>E</sub> =0, f=1MHz		23		pF

## $h_{\text{FE}}$ Classification

Classification	Q	R	
h <sub>FE</sub>	120 ~ 270	180 ~ 390	



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# **Typical Characteristics**

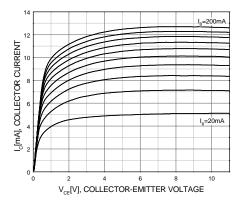


Figure 1. Static Characteristic

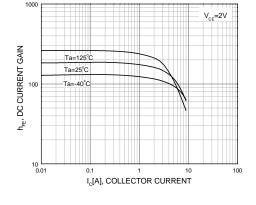


Figure 2. DC current Gain

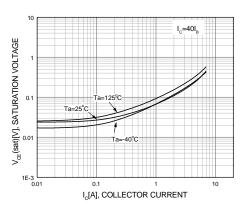


Figure 3. Collector-Emitter Saturation Voltage

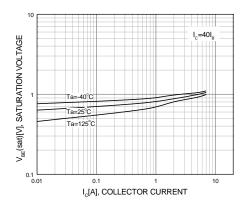


Figure 4. Base-Emitter Saturation Voltage

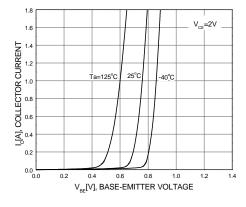


Figure 5. Base-Emitter On Voltage

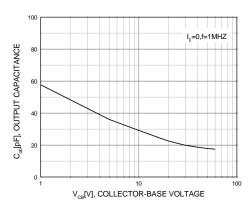
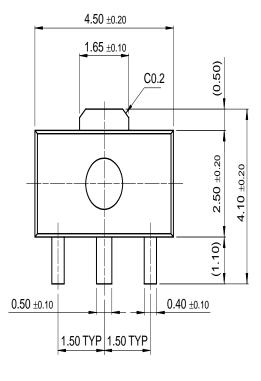


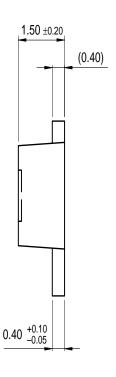
Figure 6. Common-Base Open-Circuit Output Capacitance

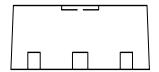
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# **Package Dimensions**

# **SOT-89**







Dimensions in Millimeters

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CoolFET™	FASTr™	MicroFET™	PowerTrench <sup>®</sup>	SuperSOT™-6
CROSSVOLT™	FRFET™	MicroPak™	QFET™	SuperSOT™-8
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E <sup>2</sup> CMOS™	HiSeC™	MSXPro™	Quiet Series™	TruTranslation™
EnSigna™	$I^2C^{TM}$	$OCX^{TM}$	RapidConfigure™	UHC™
Across the board.	. Around the world.™	OCXPro™	RapidConnect™	UltraFET <sup>®</sup>
The Power Franchise™		OPTOLOGIC <sup>®</sup>	SILENT SWITCHER®	VCX™
Programmable Active Droop™		OPTOPLANAR™	SMART START™	

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