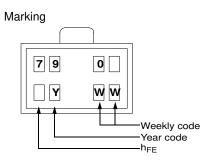


# FJC790 PNP Epitaxial Silicon Transistor

# **Camera Strobe Flash Application**

- Complement to FJC690
- High Collector Current
- Low Collector-Emitter Saturation Voltage





## Absolute Maximum Ratings \* Ta = 25°C unless otherwise noted

Symbol	Parameter	Value	Units V	
V <sub>CBO</sub>	Collector-Base Voltage	-50		
V <sub>CEO</sub>	Collector-Emitter Voltage	-40	V	
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V	
I <sub>C</sub>	Collector Current (DC)	-2	A	
P <sub>C</sub>	Power Dissipation	0.5	W	
TJ	Junction Temperature	150	°C	
T <sub>STG</sub>	Storage Temperature	- 55 ~ 150	°C	

\* These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

### Electrical Characteristics \* T<sub>a</sub> = 25°C unless otherwise noted

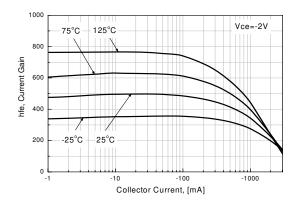
Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
BV <sub>CBO</sub>	Collector-Base Breakdown Voltage	I <sub>C</sub> = -100μA, I <sub>E</sub> = 0	-50			V
BV <sub>CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = -10mA, I <sub>B</sub> = 0	-40			V
BV <sub>EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = -100μA, I <sub>C</sub> = 0	-5			V
I <sub>CEO</sub>	Collector Cut-off Current	$V_{CE} = -35V, V_{B} = 0$			-0.1	μA
I <sub>EBO</sub>	Emitter Cut-off Current	titter Cut-off Current $V_{EB} = -4V, I_C = 0$			-0.1	μA
h <sub>FE</sub>	DC Current Gain	$ \begin{array}{l} V_{CE} = -2V, \ I_{C} = -10mA \\ V_{CE} = -2V, \ I_{C} = -500mA \\ V_{CE} = -2V, \ I_{C} = -1A \\ V_{CE} = -2V, \ I_{C} = -2A \end{array} $	300 250 200 150		800	
V <sub>CE</sub> (sat) Collector-Emitter Saturation Voltage		$    I_{C} = -0.5A, I_{B} = -5mA \\    I_{C} = -1A, I_{B} = -10mA \\    I_{C} = -2A, I_{B} = -50mA $			-250 -350 -450	mV mV mV
V <sub>BE</sub> (sat)	Base-Emitter Saturation Voltage	I <sub>C</sub> = -1A, I <sub>B</sub> = -10mA			-0.9	V
V <sub>BE</sub> (on)	Base-Emitter On Voltage	V <sub>CE</sub> = -2V, I <sub>C</sub> = 1A			-0.8	V
C <sub>OB</sub>	Collector Output Capacitance	V <sub>CB</sub> = -10V, I <sub>E</sub> = 0, f = 1MHz		20		pF

July 2007

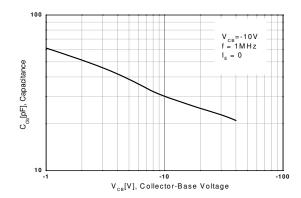
Device Marking	Device	Package	Reel Size	Tape Width	Quantity
790	FJC790	SOT-89	13"		4,000

# **Typical Performance Characteristics**

### Figure 1. DC current Gain



## Figure 2. Collector-Base Capacitance



### Figure 3. Collector-Emitter Saturation Voltage

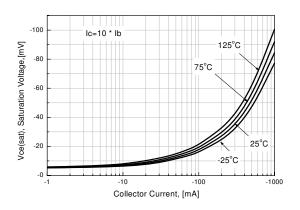


Figure 5. Base-Emitter Saturation Voltage

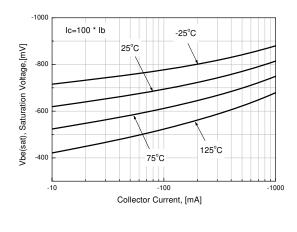


Figure 4. Collector-Emitter Saturation Voltage

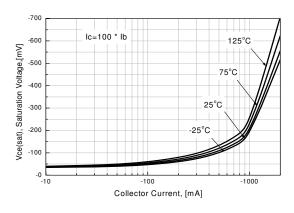
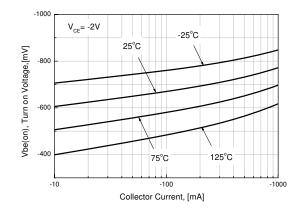
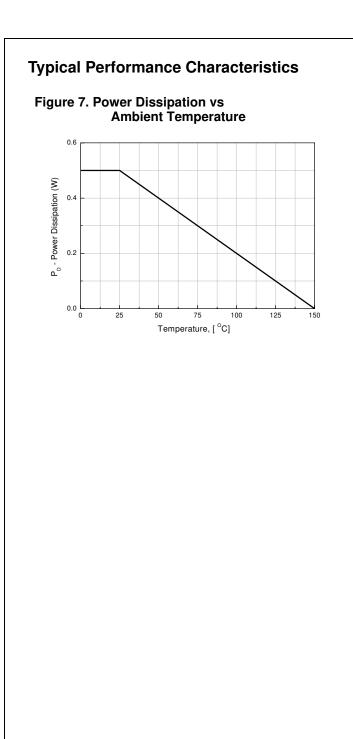
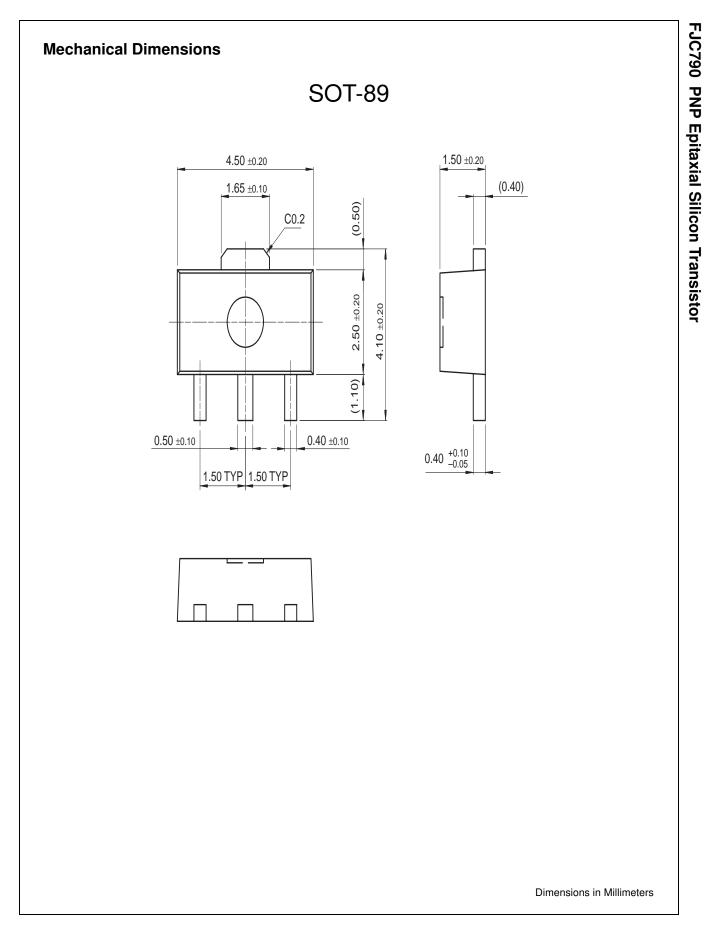


Figure 6. Base-Emitter Turn on Voltage









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FJC790TF	Full Production	Full Production	\$0.218	<u>SOT-89</u>	3	TAPE REEL	Line 1: 790 Line 2: &E&3

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