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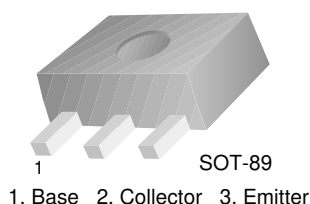


FJC790

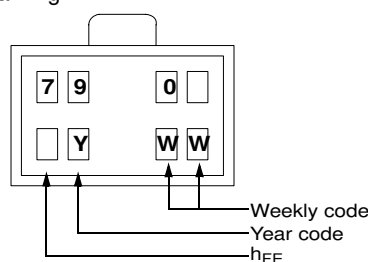
PNP Epitaxial Silicon Transistor

Camera Strobe Flash Application

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



Marking



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

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-50	V
V_{CEO}	Collector-Emitter Voltage	-40	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current (DC)	-2	A
P_C	Power Dissipation	0.5	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{STG}	Storage Temperature	- 55 ~ 150	$^\circ\text{C}$

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

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

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	$I_C = -100\mu\text{A}, I_E = 0$	-50			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	$I_C = -10\text{mA}, I_B = 0$	-40			V
BV_{EBO}	Emitter-Base Breakdown Voltage	$I_E = -100\mu\text{A}, I_C = 0$	-5			V
I_{CEO}	Collector Cut-off Current	$V_{CE} = -35\text{V}, V_B = 0$			-0.1	μA
I_{EBO}	Emitter Cut-off Current	$V_{EB} = -4\text{V}, I_C = 0$			-0.1	μA
h_{FE}	DC Current Gain	$V_{CE} = -2\text{V}, I_C = -10\text{mA}$ $V_{CE} = -2\text{V}, I_C = -500\text{mA}$ $V_{CE} = -2\text{V}, I_C = -1\text{A}$ $V_{CE} = -2\text{V}, I_C = -2\text{A}$	300 250 200 150		800	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -0.5\text{A}, I_B = -5\text{mA}$ $I_C = -1\text{A}, I_B = -10\text{mA}$ $I_C = -2\text{A}, I_B = -50\text{mA}$			-250 -350 -450	mV
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = -1\text{A}, I_B = -10\text{mA}$			-0.9	V
$V_{BE(on)}$	Base-Emitter On Voltage	$V_{CE} = -2\text{V}, I_C = 1\text{A}$			-0.8	V
C_{OB}	Collector Output Capacitance	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$		20		pF

* Pulse Test: Pulse Width $\leq 300\mu\text{s}$, Duty Cycle $\leq 2.0\%$

Package Marking and Ordering Information

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

Typical Performance Characteristics

Figure 1. DC current Gain

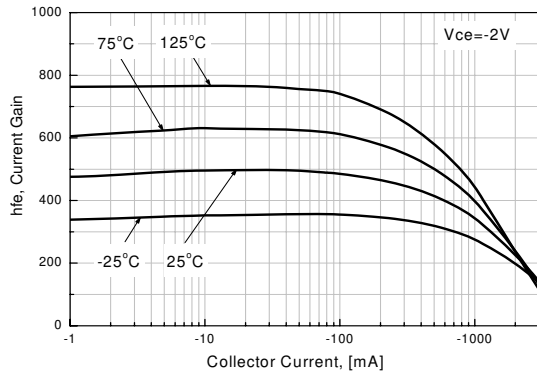


Figure 2. Collector-Base Capacitance

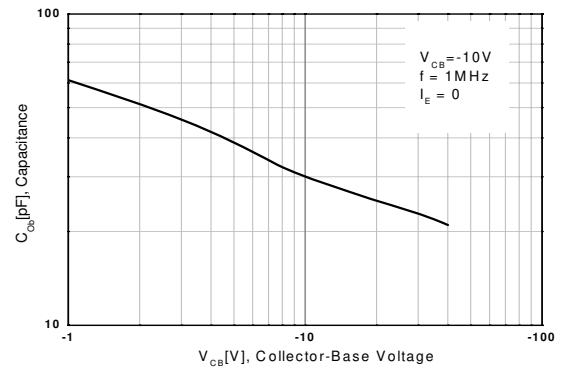


Figure 3. Collector-Emitter Saturation Voltage

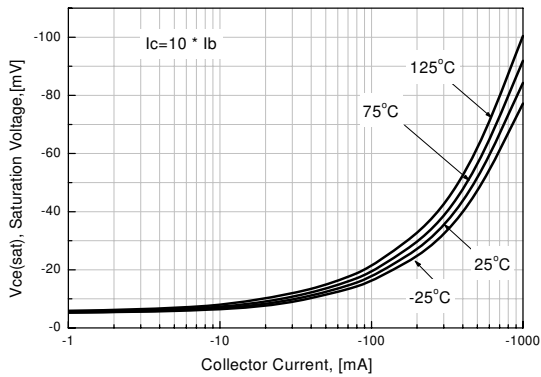


Figure 4. Collector-Emitter Saturation Voltage

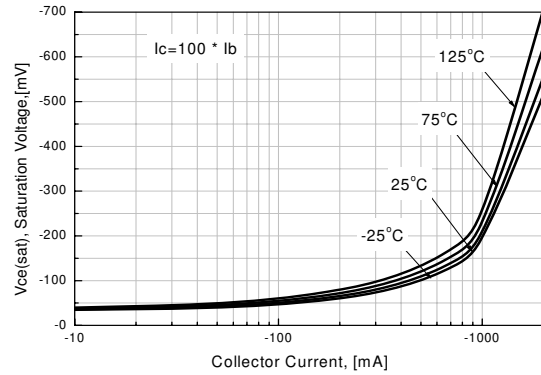


Figure 5. Base-Emitter Saturation Voltage

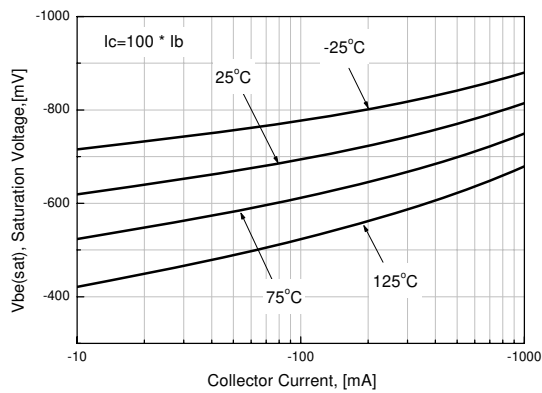
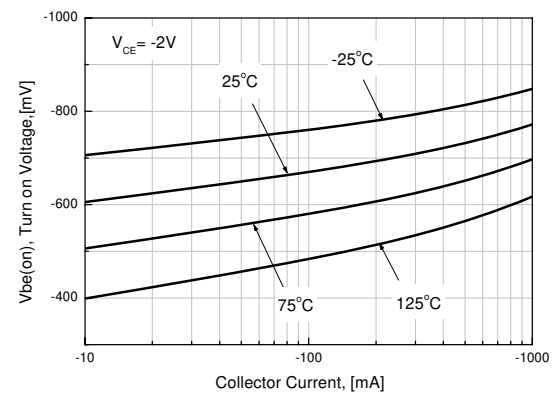
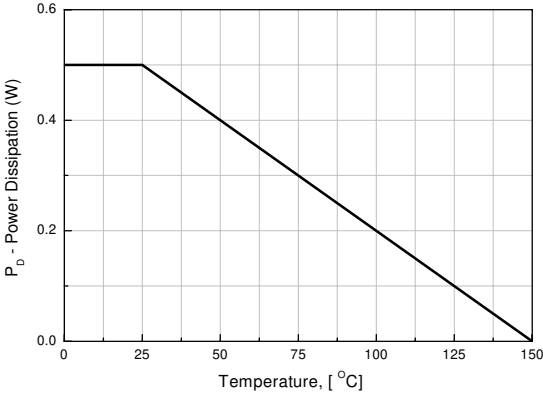


Figure 6. Base-Emitter Turn on Voltage



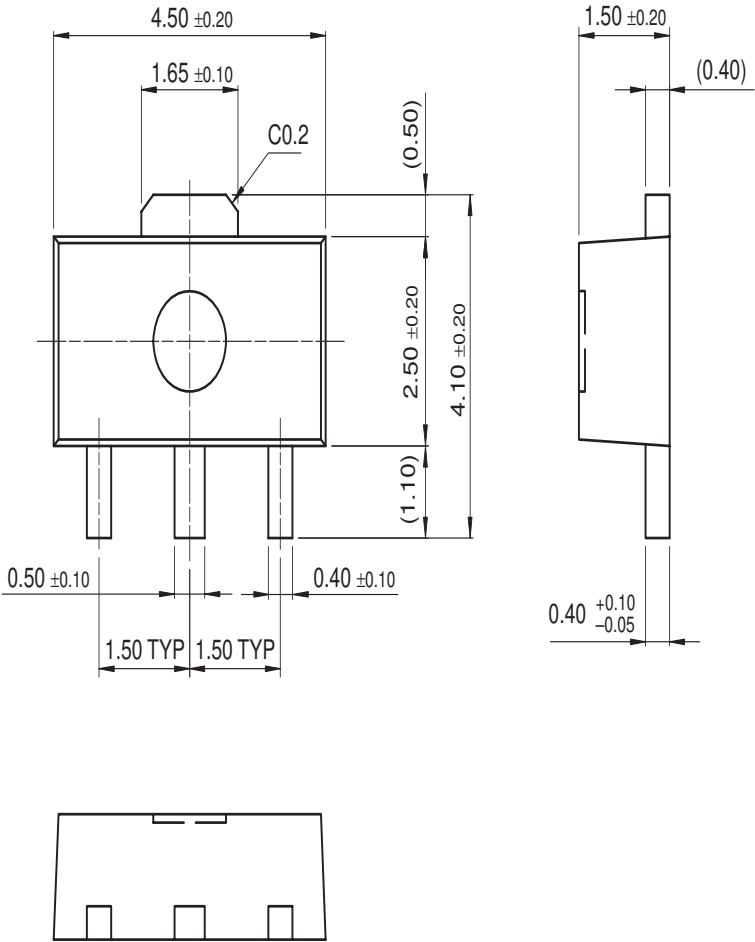
Typical Performance Characteristics

Figure 7. Power Dissipation vs Ambient Temperature



Mechanical Dimensions

SOT-89




Dimensions in Millimeters



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