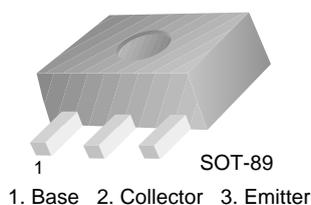


FJC690

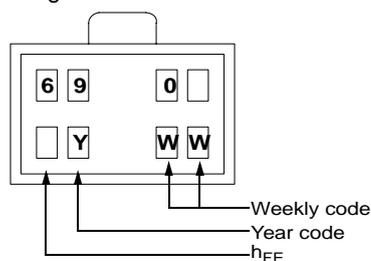
NPN Epitaxial Silicon Transistor

Camera Strobe Flash Application

- Complement to FJC790
- 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	45	V
V_{CEO}	Collector-Emitter Voltage	45	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	$^\circ\text{C}$

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	$I_C = 100\mu\text{A}, I_E = 0$	45			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	$I_C = 10\text{mA}, I_B = 0$	45			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	$V_{CE} = 2\text{V}, I_C = 100\text{mA}$ $V_{CE} = 2\text{V}, I_C = 1\text{mA}$ $V_{CE} = 2\text{V}, I_C = 2\text{mA}$	500 400 150			
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = 0.1\text{A}, I_B = 0.5\text{mA}$ $I_C = 1\text{A}, I_B = 5\text{mA}$			80 300	mV 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	$V_{CE} = 2\text{V}, I_C = 1\text{A}$			0.85	V
C_{OB}	Collector Output Capacitance	$V_{CB} = 10\text{V}, I_E = 0, f = 1\text{MHz}$		20		pF

Package Marking and Ordering Information

Device Marking	Device	Package	Reel Size	Tape Width	Quantity
690	FJC690	SOT-89	13"	--	4,000

Typical Performance Characteristics

Figure 1. DC current Gain

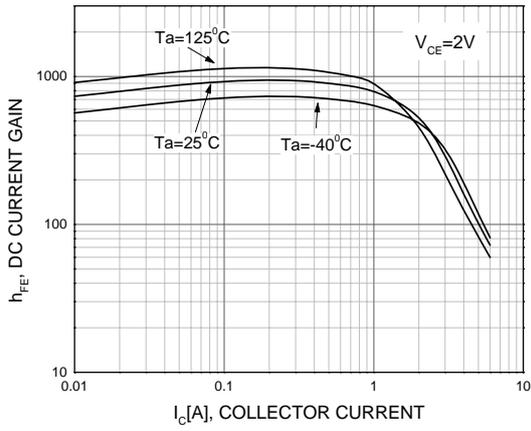


Figure 2. Collector-Emitter Saturation Voltage

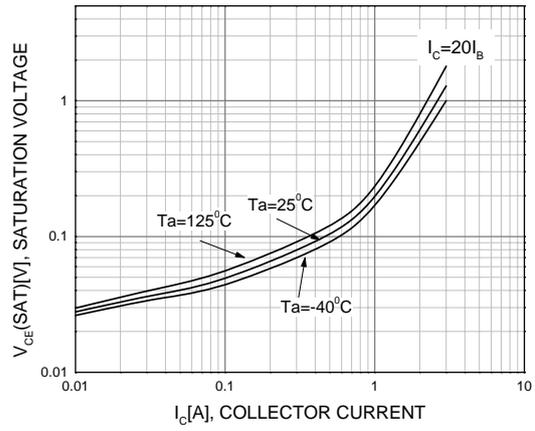
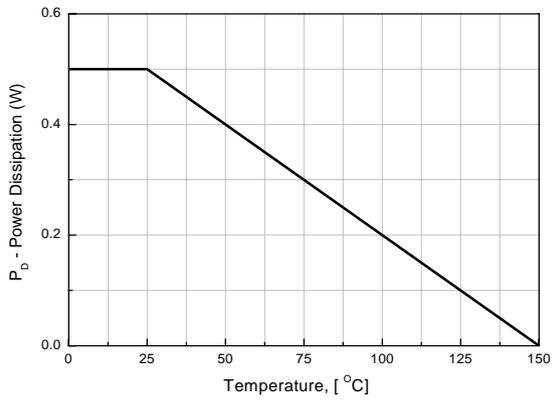


Figure 3. Power Dissipation vs Ambient Temperature





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