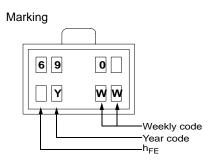


FJC690 NPN Epitaxial Silicon Transistor

Camera Strobe Flash Application

- Complement to FJC790
- High Collector Current
- Low Collector-Emitter Saturation Voltage





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

Symbol	Parameter	eter Value	
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
TJ	Junction Temperature	150	°C
T _{STG}	Storage Temperature	- 55 ~ 150	°C

Electrical Characteristics Ta = 25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
BV _{CBO}	Collector-Base Breakdown Voltage	I _C = 100μA, I _E = 0	45			V
BV _{CEO}	Collector-Emitter Breakdown Voltage	I _C = 10mA, I _B = 0	45			V
BV _{EBO}	Emitter-Base Breakdown Voltage	$I_{E} = 100 \mu A, I_{C} = 0$	5			V
I _{CEO}	Collector Cut-off Current	$V_{CE} = 35V, V_{B} = 0$			0.1	μΑ
I _{EBO}	Emitter Cut-off Current	$V_{EB} = 4V, I_{C} = 0$			0.1	μA
h _{FE}	DC Current Gain	$V_{CE} = 2V, I_C = 100mA$ $V_{CE} = 2V, I_C = 1mA$ $V_{CE} = 2V, I_C = 2mA$	500 400 150			
V _{CE} (sat)	Collector-Emitter Saturation Voltage	$I_{C} = 0.1A, I_{B} = 0.5mA$ $I_{C} = 1A, I_{B} = 5mA$			80 300	mV mV
V _{BE} (sat)	Base-Emitter Saturation Voltage	I _C = 1A, I _B = 10mA			0.9	V
V _{BE} (on)	Base-Emitter On Voltage	$V_{CE} = 2V, I_{C} = 1A$			0.85	V
C _{OB}	Collector Output Capacitance	V _{CB} = 10V, I _E = 0, f = 1MHz		20		pF

July 2007

FJC690
NPN
Epitaxial
Silicon
Transistor

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

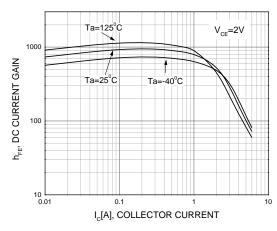


Figure 3. Power Dissipation vs Ambient Temperature

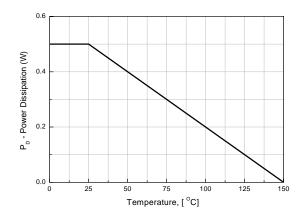
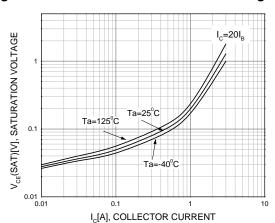
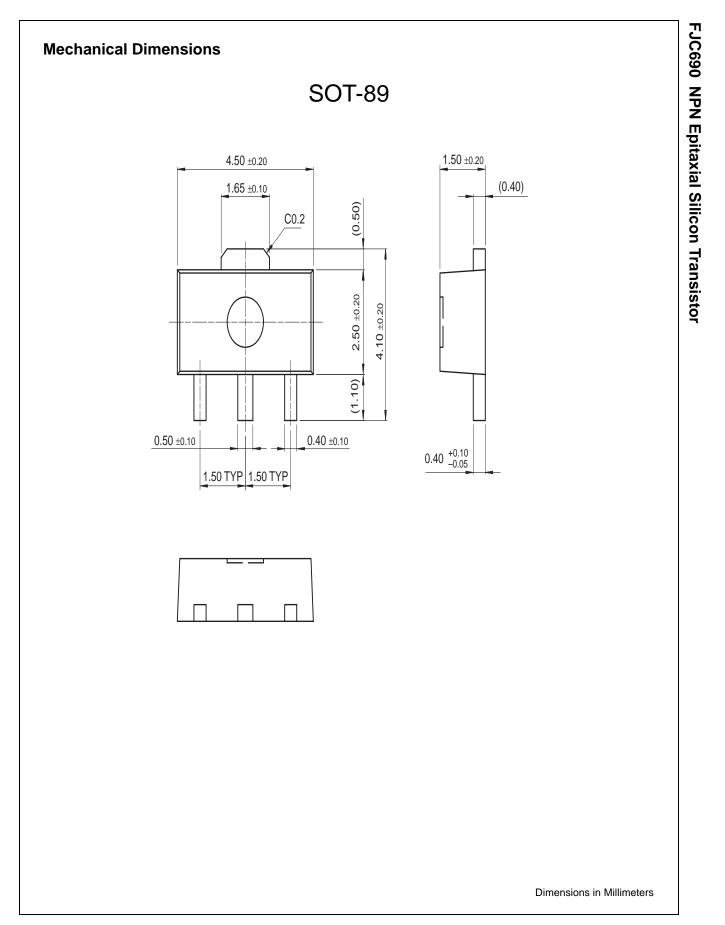


Figure 2. Collector-Emitter Saturation Voltage







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FJC690TF	Full Production	Full Production	\$0.218	<u>SOT-89</u>	3	TAPE REEL	Line 1: 690 Line 2: &E&3

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