



**THE DATASHEET OF  
FJC2098RTF**

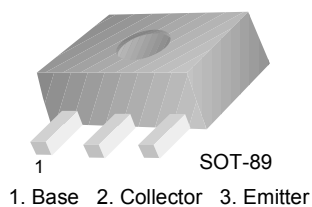


# FJC2098

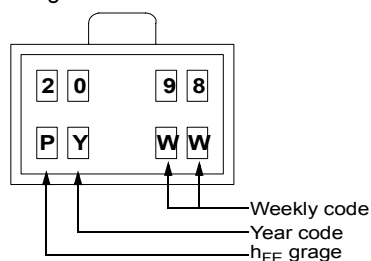
## NPN Epitaxial Silicon Transistor

### Camera Strobe Flash Application

- Complement to FJC1386
- High Collector Current
- Low Collector-Emitter Saturation Voltage



Marking



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

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	50	V
$V_{CEO}$	Collector-Emitter Voltage	20	V
$V_{EBO}$	Emitter-Base Voltage	6	V
$I_C$	Collector Current (DC)	5	A
$P_C$	Power Dissipation( $T_C=25^\circ\text{C}$ )	0.5	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{STG}$	Storage Temperature	- 55 ~ 150	$^\circ\text{C}$

### Electrical Characteristics $T_C=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
$BV_{CBO}$	Collector-Base Breakdown Voltage	$I_C = 50\mu\text{A}, I_E = 0$	50			V
$BV_{CEO}$	Collector-Emitter Breakdown Voltage	$I_C = 1\text{mA}, I_B = 0$	20			V
$BV_{EBO}$	Emitter-Base Breakdown Voltage	$I_E = 50\mu\text{A}, I_C = 0$	6			V
$I_{CEO}$	Collector Cut-off Current	$V_{CE} = 40\text{V}, V_B = 0$			0.5	$\mu\text{A}$
$I_{EBO}$	Emitter Cut-off Current	$V_{EB} = 5\text{V}, I_C = 0$			0.5	$\mu\text{A}$
$h_{FE}$	DC Current Gain	$V_{CE} = 2\text{V}, I_C = 0.5\text{A}$	120		390	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = 4\text{A}, I_B = 0.1\text{A}$			1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = 4\text{A}, I_B = 0.1\text{A}$			1.2	V
$C_{OB}$	Collector Output Capacitance	$V_{CB} = 20\text{V}, I_E = 0, f = 1\text{MHz}$		23		pF

**h<sub>FE</sub> Classification**

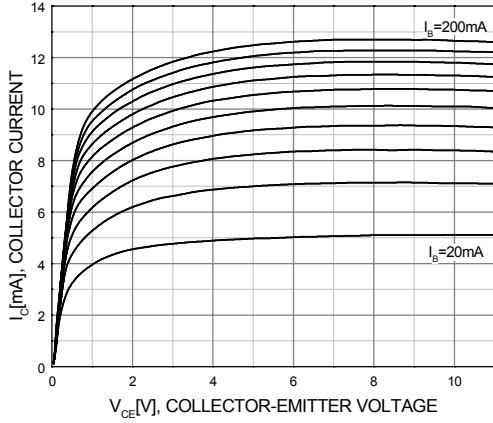
Classification	Q	R
h <sub>FE</sub>	120 ~ 270	180 ~ 390

**Package Marking and Ordering Information**

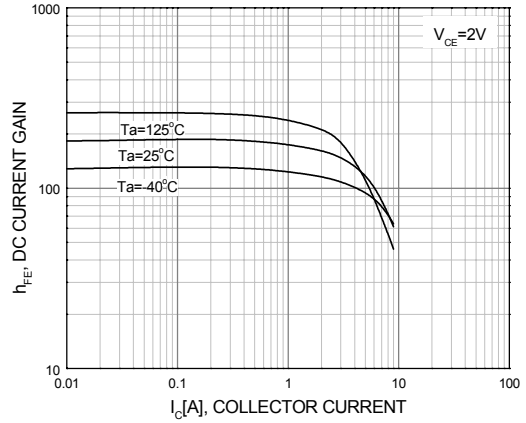
Device Marking	Device	Package	Reel Size	Tape Width	Quantity
2098	FJC2098	SOT-89	13"	--	4,000

## Typical Performance Characteristics

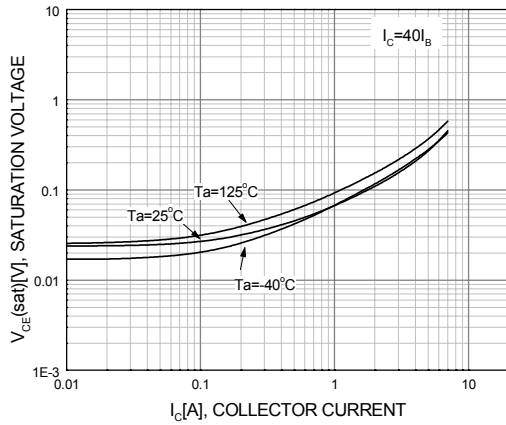
**Figure 1. Static Characteristic**



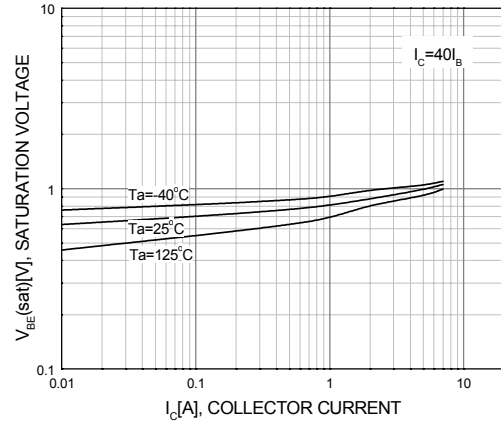
**Figure 2. DC Current Gain**



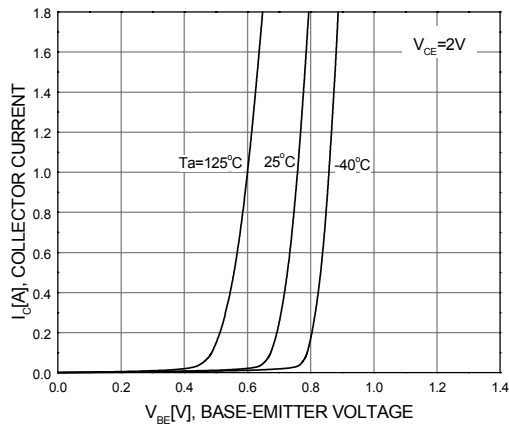
**Figure 3. Collector-Emitter Saturation Voltage**



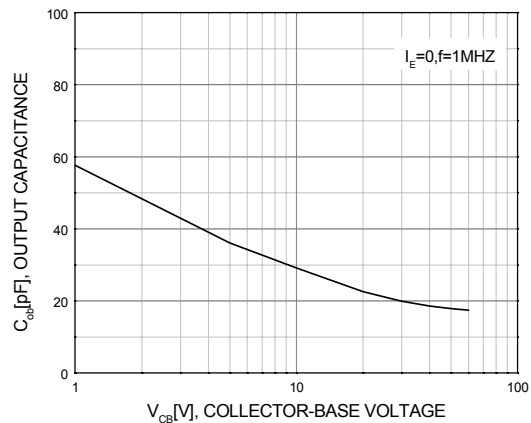
**Figure 4. Base-Emitter Saturation Voltage**



**Figure 5. Base-Emitter On Voltage**

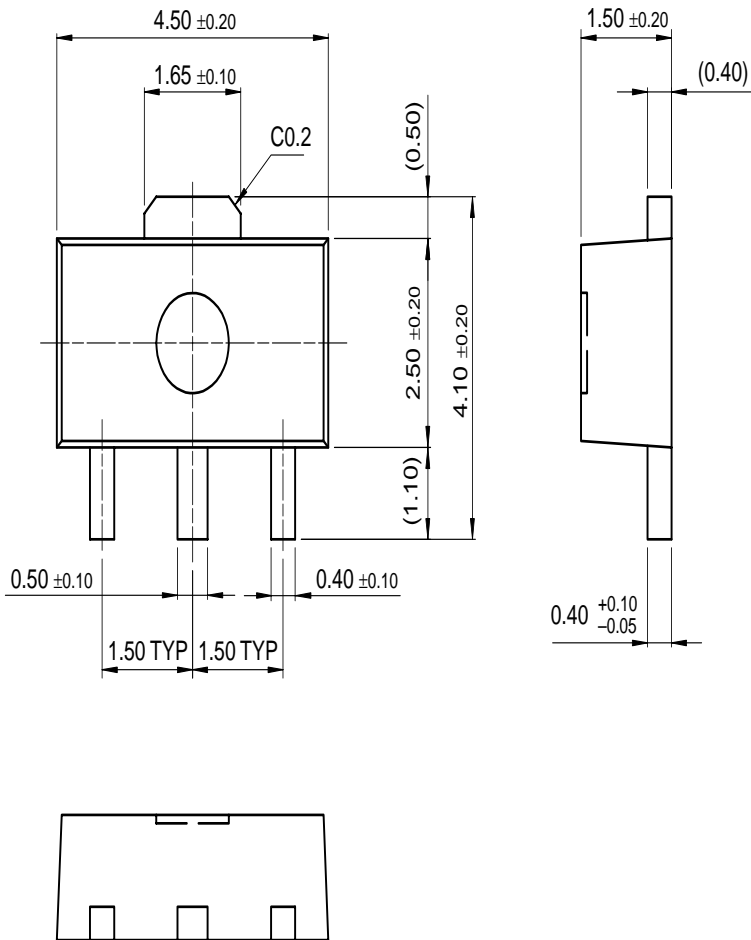


**Figure 6. Common-Base Open-Circuit Output Capacitance**



Mechanical Dimensions

SOT-89



Dimensions in Millimeters

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FACT Quiet Series™		OPTOPLANAR™	SPM™	
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		PowerEdge™	SuperSOT™-6	

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