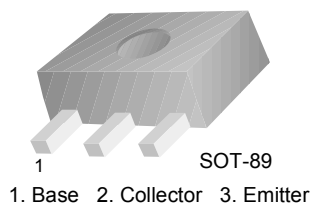


# FJC1386

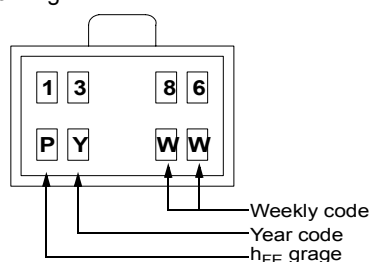
## PNP Epitaxial Silicon Transistor

### Low Saturation Transistor Medium Power Amplifier

- Complement to FJC2098
- 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	-30	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 ( $T_a = 25^\circ\text{C}$ )	0.5	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{STG}$	Storage Temperature	-55 to +150	$^\circ\text{C}$

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

Symbol	Parameter	Test Condition	Min.	Max.	Units
$BV_{CBO}$	Collector-Base Breakdown Voltage	$I_C = -50\mu\text{A}$ , $I_E = 0$	-30		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
$I_{CBO}$	Collector-Cutoff Current	$V_{CB} = -20\text{V}$ , $V_B = 0$		-0.5	$\mu\text{A}$
$I_{EBO}$	Emitter-Cutoff Current	$V_{EB} = -5\text{V}$ , $I_C = 0$		-0.5	$\mu\text{A}$
$h_{FE}$	DC Current Gain	$V_{CE} = -2\text{V}$ , $I_C = -0.5\text{A}$	80	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	$I_C = -4\text{A}$ , $I_B = -0.1\text{A}$		-1.5	V

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

Symbol	Parameter	Max.	Units
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	250	$^\circ\text{C/W}$

 **$h_{FE}$  Classification**

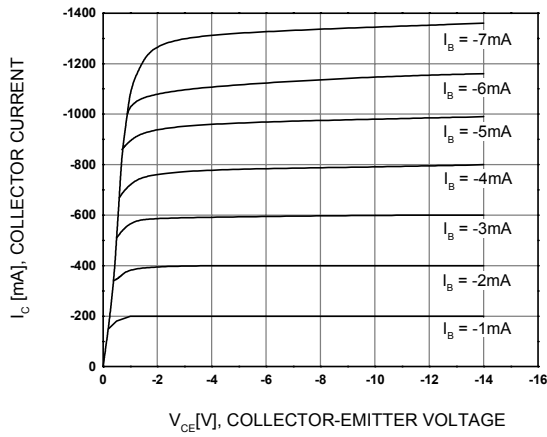
Classification	P	Q	R
$h_{FE}$	80 ~ 180	120 ~ 270	180 ~ 390

**Package Marking and Ordering Information**

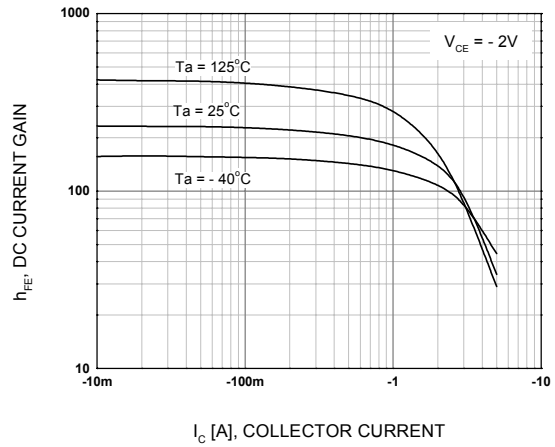
Device Marking	Device	Package	Reel Size	Tape Width	Quantity
1386	FJC1386	SOT-89	13"	--	4,000

## Typical Performance Characteristics

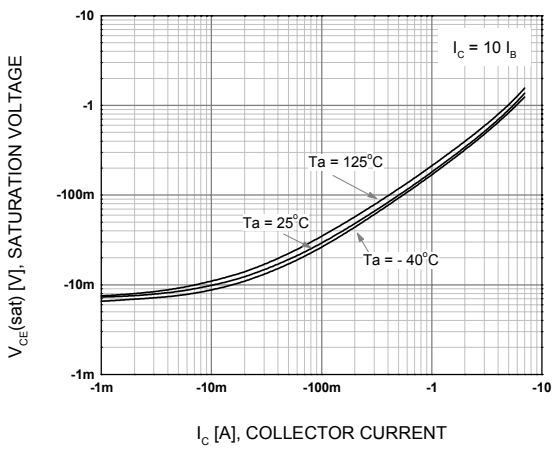
**Figure 1. Static Characteristic**



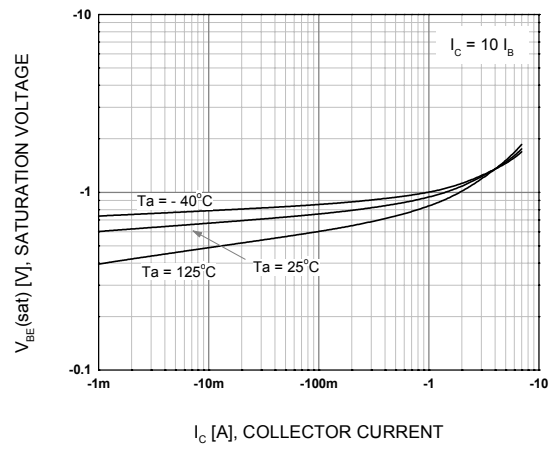
**Figure 2. DC Current Gain**



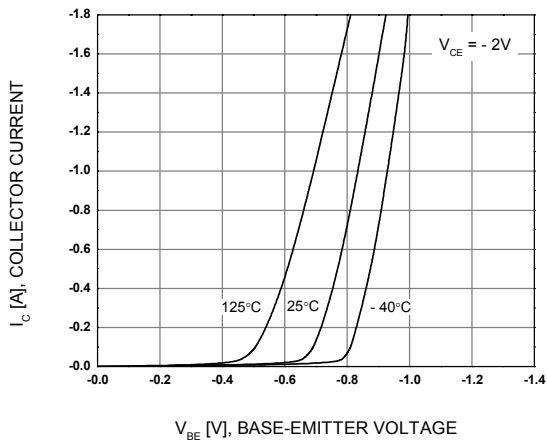
**Figure 3. Collector-Emitter Saturation Voltage**



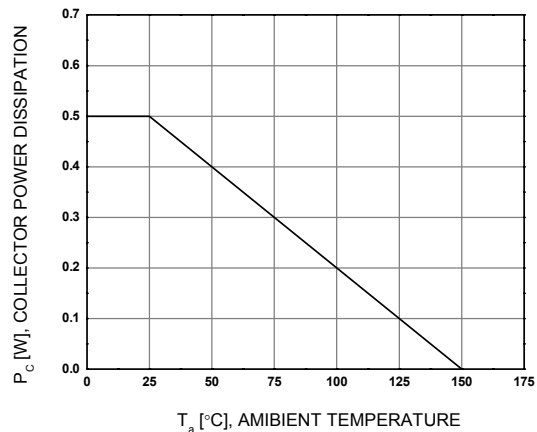
**Figure 4. Base-Emitter Saturation Voltage**



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

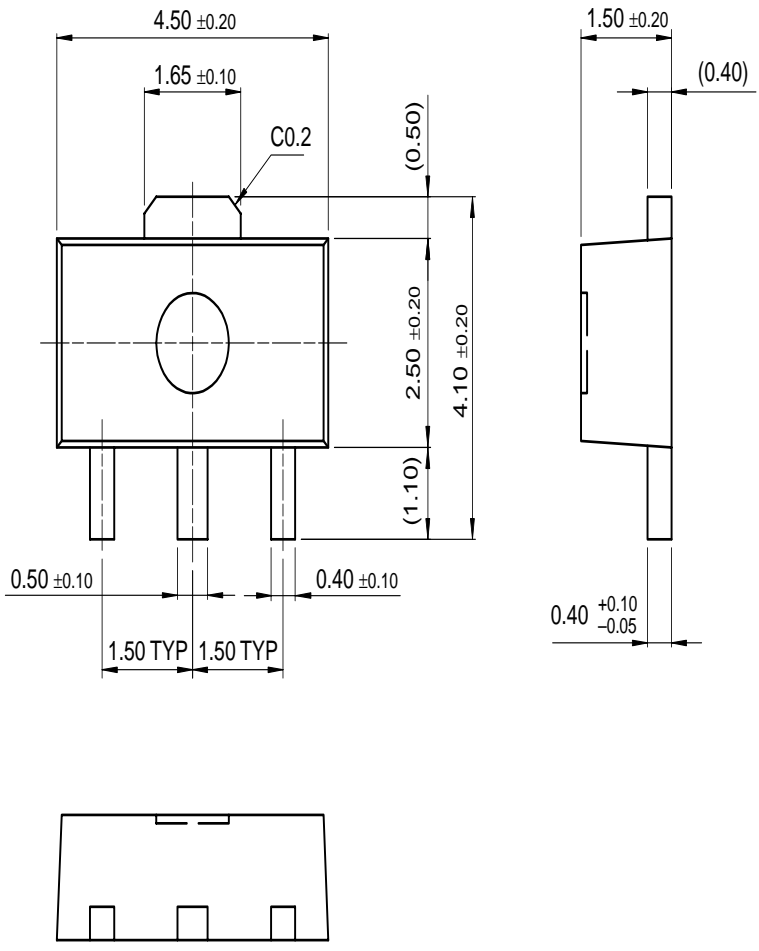


**Figure 6. Power Derating**



Mechanical Dimensions

SOT-89



Dimensions in Millimeters

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CROSSVOLT™	GTO™	MICROWIRE™	Quiet Series™	UHC™
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EcoSPARK™	I <sup>2</sup> C™	MSXPro™	RapidConnect™	UniFET™
E <sup>2</sup> CMOS™	i-Lo™	OCX™	μSerDes™	VCX™
EnSigna™	ImpliedDisconnect™	OCXPro™	SILENT SWITCHER®	Wire™
FACT™	IntelliMAX™	OPTOLOGIC®	SMART START™	
FACT Quiet Series™		OPTOPLANAR™	SPM™	
Across the board. Around the world.™		PACMAN™	Stealth™	
The Power Franchise®		POP™	SuperFET™	
Programmable Active Droop™		Power247™	SuperSOT™-3	
		PowerEdge™	SuperSOT™-6	

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