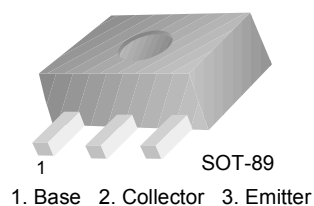


FJC1386

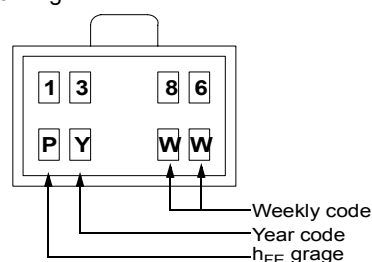
PNP Epitaxial Silicon Transistor

Low Saturation Transistor Medium Power Amplifier

- Complement to FJC2098
- High Collector Current
- Low Collector-Emitter Saturation Voltage



Marking



Absolute Maximum Ratings T_a = 25°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°C)	0.5	W
T _J	Junction Temperature	150	°C
T _{STG}	Storage Temperature	-55 to +150	°C

Electrical Characteristics T_a = 25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Max.	Units
BV _{CBO}	Collector-Base Breakdown Voltage	I _C = -50μA, I _E = 0	-30		V
BV _{CEO}	Collector-Emitter Breakdown Voltage	I _C = -1mA, I _B = 0	-20		V
BV _{EBO}	Emitter-Base Breakdown Voltage	I _E = -50μA, I _C = 0	-6		V
I _{CBO}	Collector-Cutoff Current	V _{CB} = -20V, V _B = 0		-0.5	μA
I _{EBO}	Emitter-Cutoff Current	V _{EB} = -5V, I _C = 0		-0.5	μA
h _{FE}	DC Current Gain	V _{CE} = -2V, I _C = -0.5A	80	390	
V _{CE (sat)}	Collector-Emitter Saturation Voltage	I _C = -4A, I _B = -0.1A		-1.0	V
V _{BE (sat)}	Base-Emitter Saturation Voltage	I _C = -4A, I _B = -0.1A		-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

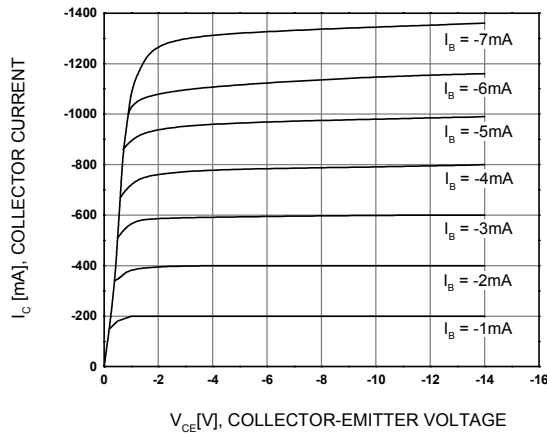


Figure 2. DC Current Gain

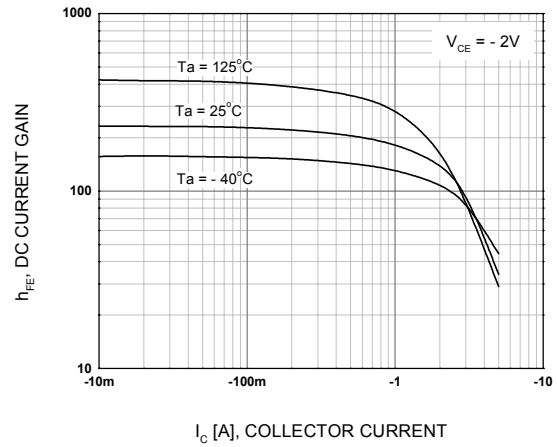


Figure 3. Collector-Emitter Saturation Voltage

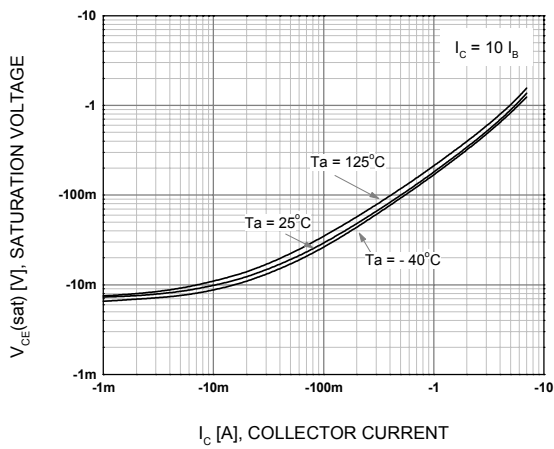


Figure 4. Base-Emitter Saturation Voltage

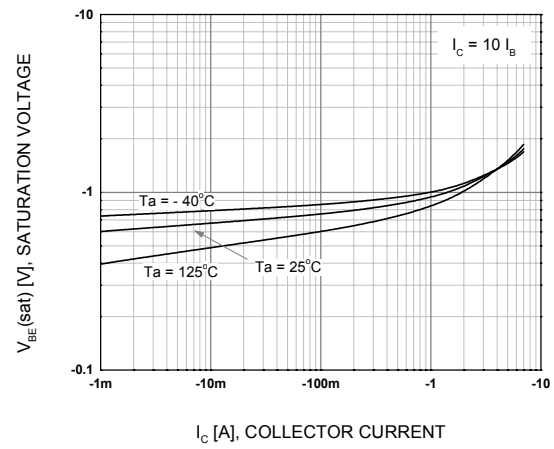


Figure 5. Base-Emitter On Voltage

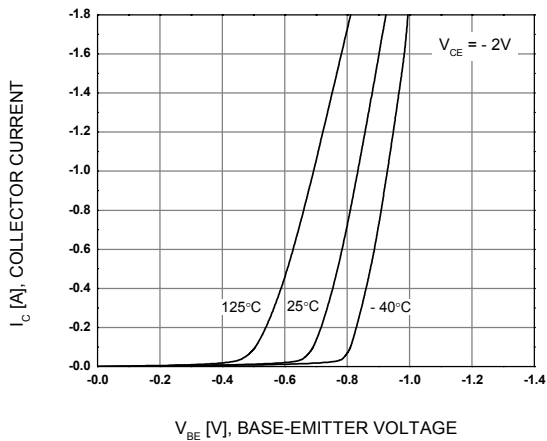
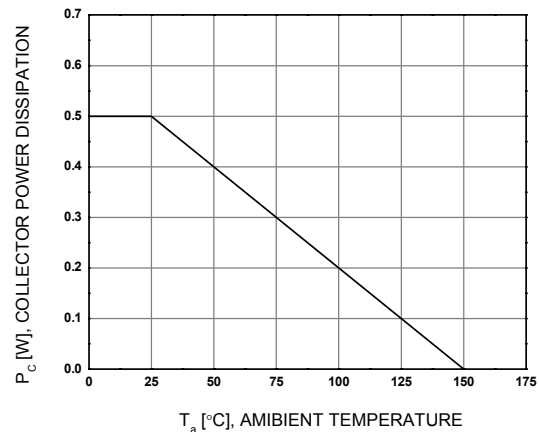


Figure 6. Power Derating



Technical drawing of a mechanical part showing three views: front, side, and top.

Front View Dimensions:

- Overall width: 4.50 ± 0.20
- Top feature width: 1.65 ± 0.10
- Top feature height: 0.50
- Central hole diameter: 2.50 ± 0.20
- Overall height: 4.10 ± 0.20
- Bottom feature height: 1.10
- Bottom feature width (left): 0.50 ± 0.10
- Bottom feature width (right): 0.40 ± 0.10
- Bottom feature width (center): 1.50 TYP

Side View Dimensions:

- Overall width: 1.50 ± 0.20
- Top feature width: 0.40
- Bottom feature width: $0.40^{+0.10}_{-0.05}$

Top View Dimensions:

- Overall width: 4.50 ± 0.20
- Overall height: 4.10 ± 0.20

Notes:

- Surface finish: $Ra 0.2$

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Programmable Active Droop™		Power247™	SuperSOT™-3	
		PowerEdge™	SuperSOT™-6	

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Rev. I16



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