



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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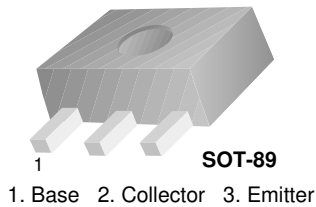


FJC1963

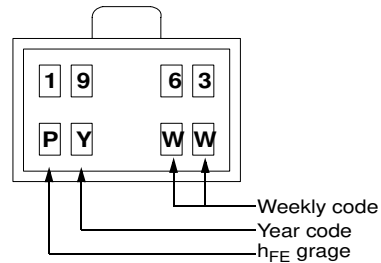
NPN Epitaxial Silicon Transistor

Features

- Audio Power Amplifier Applications
- Complement to FJC1308
- 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	50	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current (DC)	3	A
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{STG}	Storage Temperature	- 55 to + 150	$^\circ\text{C}$

Thermal Characteristics

Symbol	Parameter	Value	Units
P_D	Power Dissipation ($T_A=25^\circ\text{C}$)	0.5	W
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	250	$^\circ\text{C}/\text{W}$

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

Symbol	Parameter	Test conditions	Min.	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	$I_C = 1\text{mA}, I_B = 0$	30		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	μA
I_{EBO}	Emitter Cut-off Current	$V_{EB} = 5\text{V}, I_C = 0$		0.5	μA
h_{FE}	DC Current Gain	$V_{CE} = 2\text{V}, I_C = 0.5\text{A}$	120	560	
$V_{CE}(\text{sat})$	Collector-Emitter Saturation Voltage	$I_C = 1.5\text{A}, I_B = 0.15\text{A}$		0.45	V
$V_{BE}(\text{sat})$	Base-Emitter Saturation Voltage	$I_C = 1.5\text{A}, I_B = 0.15\text{A}$		1.2	V

 h_{FE} Classification

Classification	Q	R	S
h_{FE}	120 ~ 270	180 ~ 390	280 ~ 560

Package Marking and Ordering Information

Device Marking	Device	Package	Reel Size	Tape Width	Quantity
1963	FJC1963	SOT-89	13"	--	4,000

Typical Performance Characteristics

Figure 1. Static Characteristic

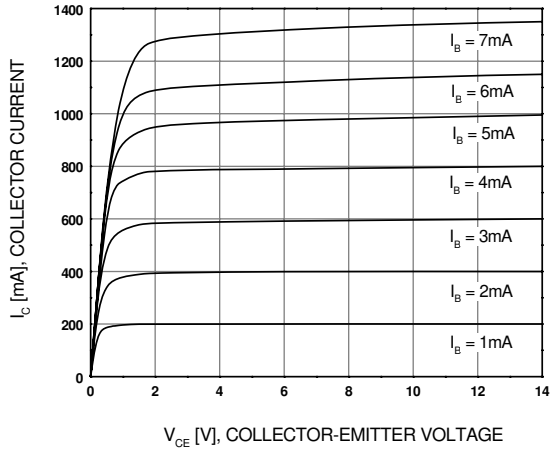


Figure 2. DC Current Gain

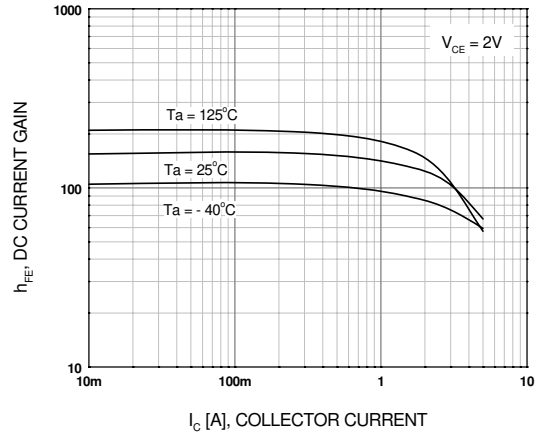


Figure 3. Collector-Emitter Saturation Voltage

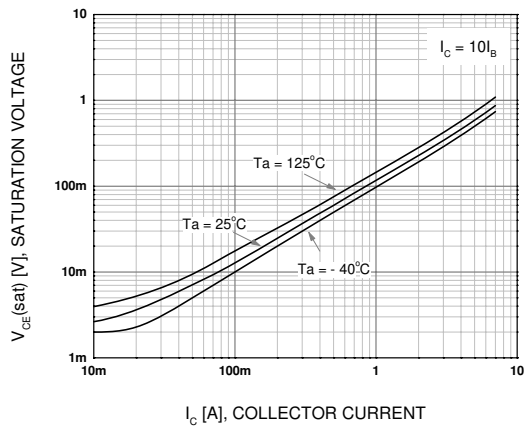


Figure 4. Base-Emitter Saturation Voltage

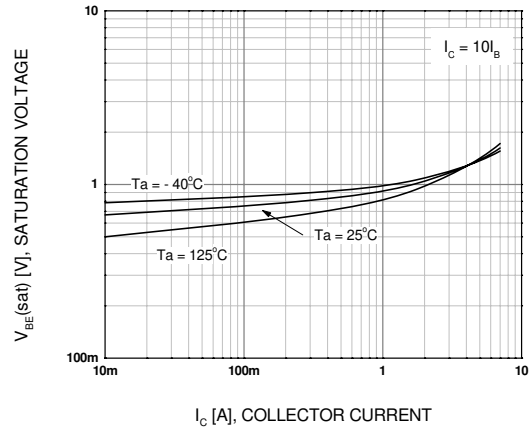


Figure 5. Base-Emitter On Voltage

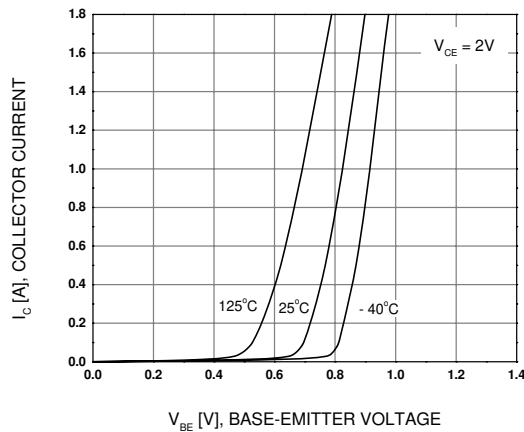
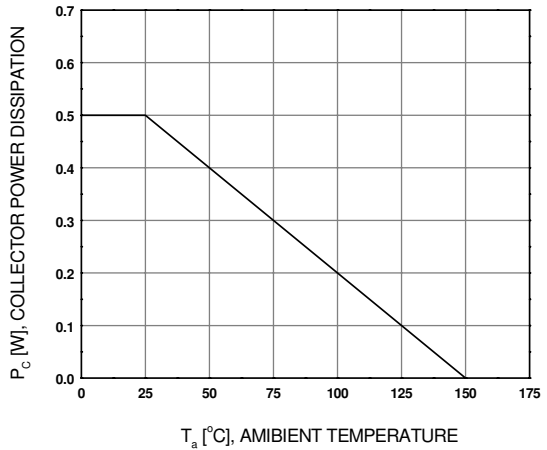
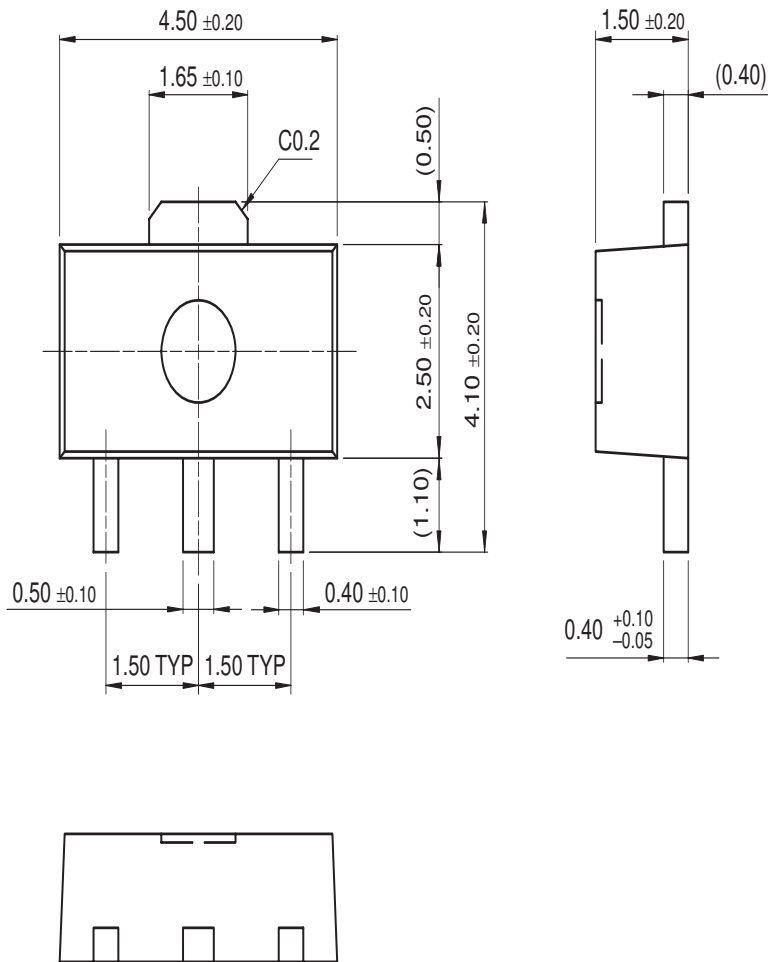


Figure 6. Power Derating



Physical Dimensions

SOT-89






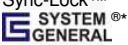


Dimensions in Millimeters



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