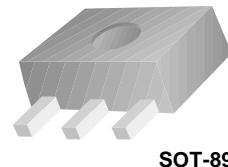


FJC2383

Color TV Audio Output & Color TV Vertical Deflection Output



SOT-89

NPN Epitaxial Silicon Transistor

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

Symbol	Parameter	Ratings	Units
V_{CBO}	Collector-Base Voltage	160	V
V_{CEO}	Collector-Emitter Voltage	160	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current	1	A
I_B	Base Current	0.5	A
P_C	Collector Power Dissipation	500	mW
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{STG}	Storage Temperature	-55 ~ 150	$^\circ\text{C}$

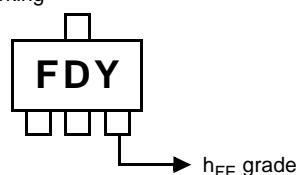
Electrical Characteristics $T_a=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
I_{CBO}	Collector Cut-off Current	$V_{CB}=150\text{V}$, $I_E=0$			1	μA
I_{EBO}	Emitter Cut-off Current	$V_{EB}=6\text{V}$, $I_C=0$			1	μA
BV_{CEO}	Collector-Emitter Breakdown Voltage	$I_C=10\text{mA}$, $I_B=0$	160			V
h_{FE}	DC Current Gain	$V_{CE}=5\text{V}$, $I_C=200\text{mA}$	100		320	
$V_{CE}(\text{sat})$	Collector-Emitter Saturation Voltage	$I_C=500\text{mA}$, $I_B=50\text{mA}$			1.5	V
$V_{BE}(\text{on})$	Base-Emitter On Voltage	$V_{CE}=5\text{V}$, $I_C=5\text{mA}$	0.45		0.75	V
f_T	Current Gain Bandwidth Product	$V_{CE}=5\text{V}$, $I_C=200\text{mA}$	20	100		MHz
C_{ob}	Output Capacitance	$V_{CB}=10\text{V}$, $I_E=0$, $f=1\text{MHz}$			20	pF

h_{FE} Classification

Classification	O	Y
h_{FE}	100 ~ 200	160 ~ 320

Marking



Typical Characteristics

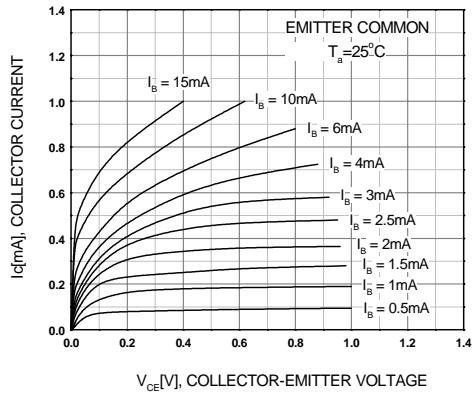


Figure 1. Static Characteristic

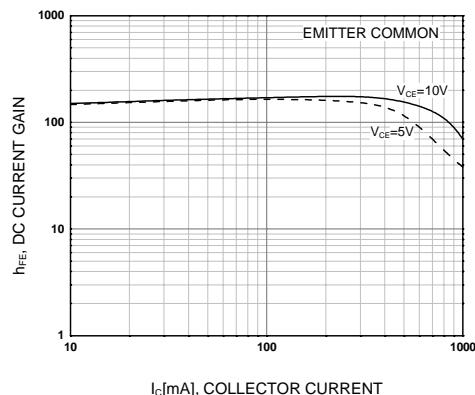


Figure 2. DC current Gain

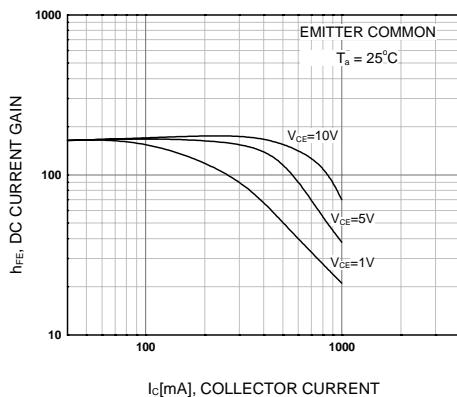


Figure 3. DC current Gain

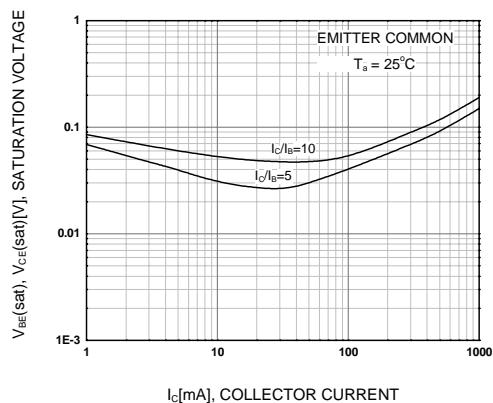


Figure 4. Collector-Emitter Saturation Voltage

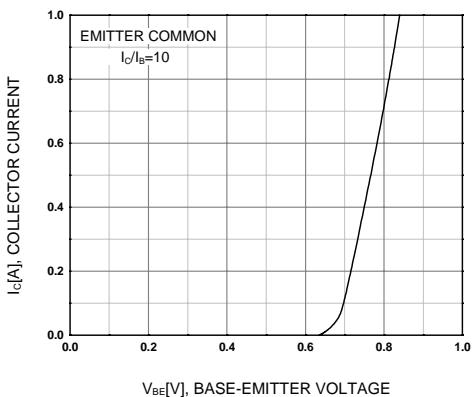


Figure 5. Base-Emitter On Voltage

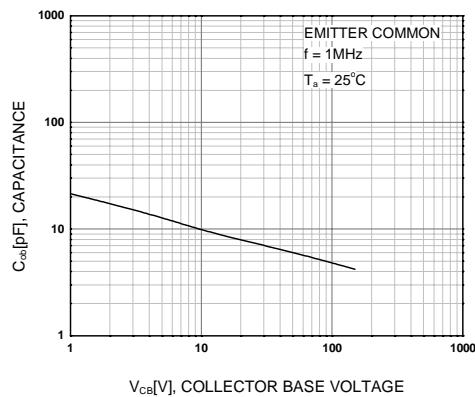


Figure 6. Collector Output Capacitance

Typical Characteristics (Continued)

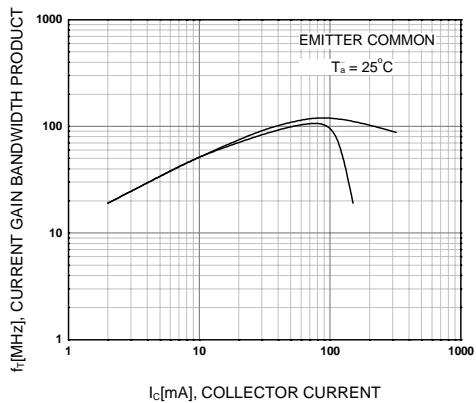
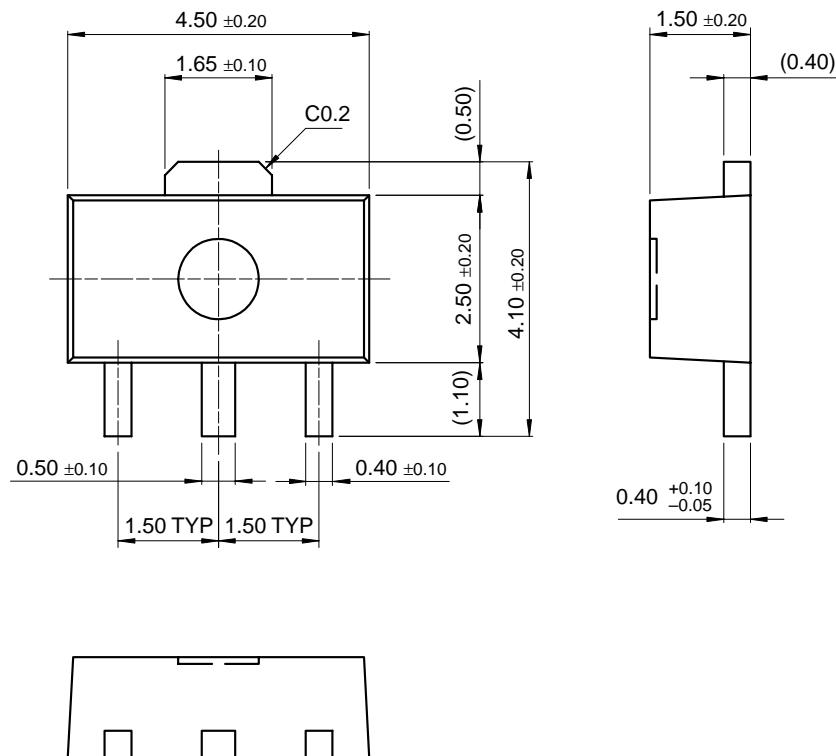


Figure 7. Current Gain Bandwidth Product

Package Dimensions

SOT-89



Dimensions in Millimeters

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CROSSVOLT™	GlobalOptoisolator™	MicroPak™	QS™	SyncFET™
DOME™	GTO™	MICROWIRE™	QT Optoelectronics™	TinyLogic®
EcoSPARK™	HiSeC™	MSX™	Quiet Series™	TINYOPTO™
E ² CMOS™	I ² C™	MSXPro™	RapidConfigure™	TruTranslation™
EnSigna™	i-Lo™	OCX™	RapidConnect™	UHC™
FACT™	ImpliedDisconnect™	OCXPro™	μSerDes™	UltraFET®
FACT Quiet Series™		OPTOLOGIC®	SILENT SWITCHER®	VCX™
Across the board. Around the world.™		OPTOPLANAR™	SMART START™	
The Power Franchise®		PACMAN™	SPM™	
Programmable Active Droop™		POP™	Stealth™	

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No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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