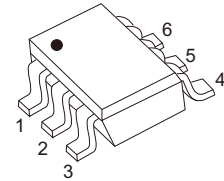


Features

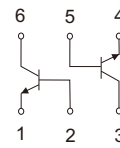
- Two transistors in one package
- This device is designed for general purpose amplifier applications
- High stability and high Reliability

SOT-363



Mechanical Data

- Case: SOT-363
- Terminals: Plated solderable per MIL-STD-750, method 2026
- Mounting Position: Any
- Marking: 1F



Maximum Ratings ($T_A=25^{\circ}\text{C}$ Unless otherwise specified)

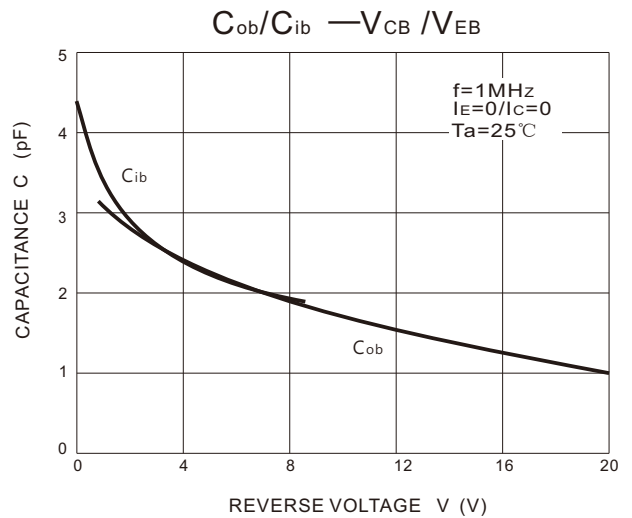
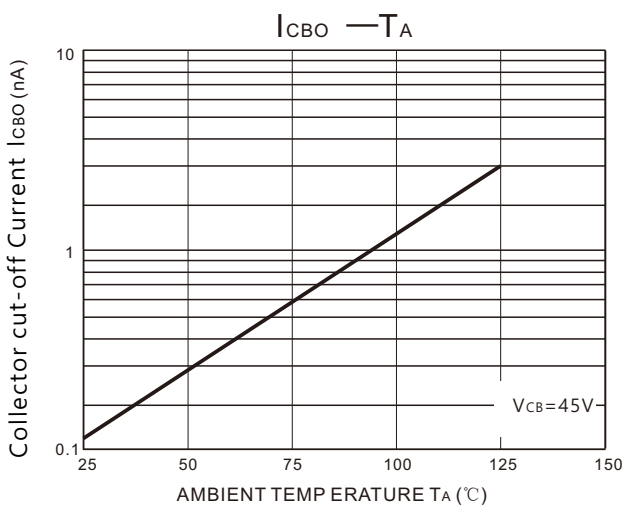
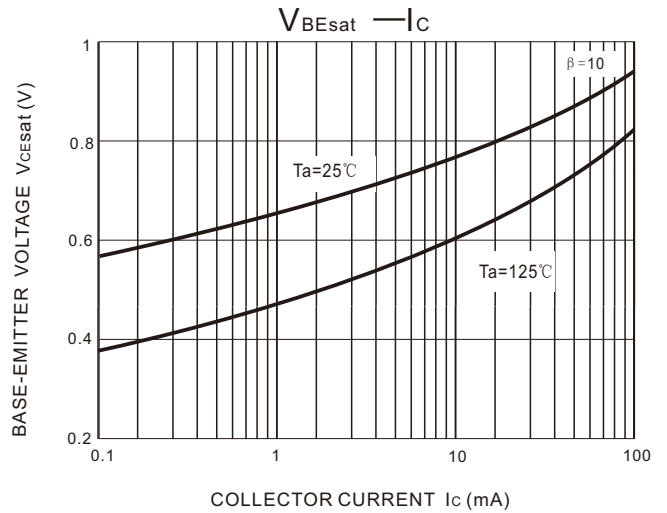
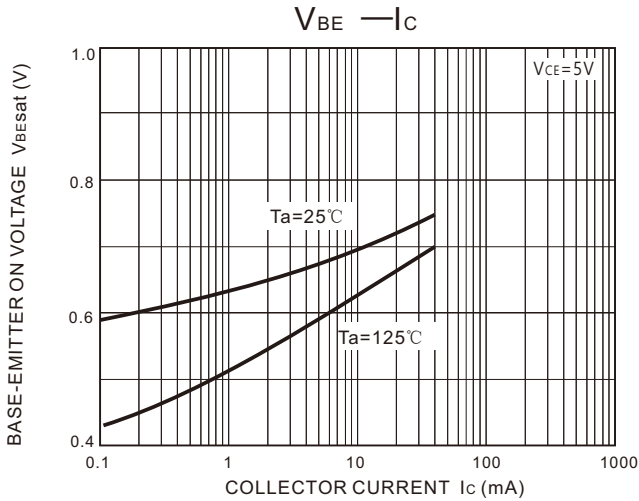
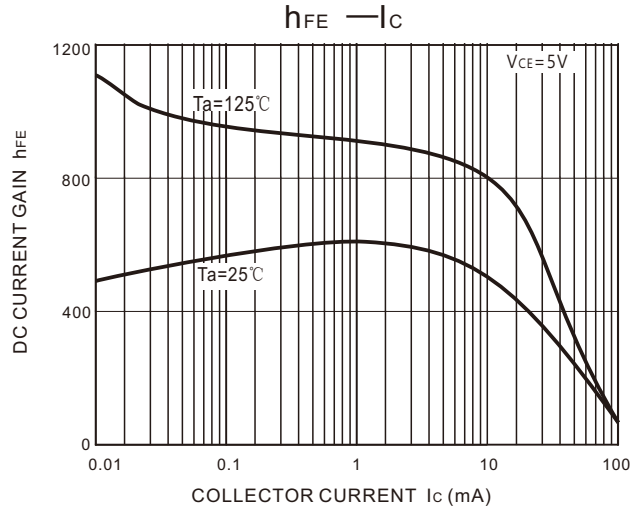
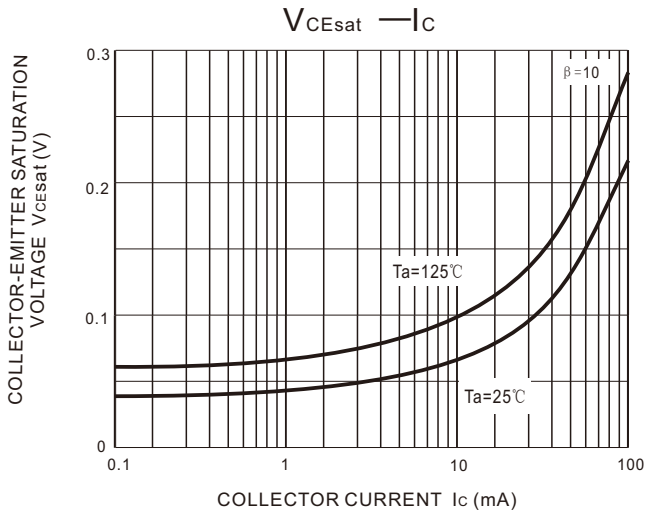
Parameter	Symbol	Unit	Value
Collector-Emitter Voltage	V_{CEO}	V	45
Collector-Base Voltage	V_{CBO}	V	50
Emitter-Base Voltage	V_{EBO}	V	6
Collector Current, Continuous	I_C	mA	100
Collector Power Dissipation	P_D	mW	200
Operation Junction Temperature	T_J	$^{\circ}\text{C}$	-55 to +150
Storage Temperature	T_{STG}	$^{\circ}\text{C}$	-55 to +150
Thermal resistance From junction to ambient	$R_{\theta JA}$	$^{\circ}\text{C}/\text{W}$	625

Electrical Characteristics($T_A=25^{\circ}\text{C}$ Unless otherwise specified)

Parameter	Symbol	Unit	Conditions	Min	Max
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	V	$I_C=1\text{mA}, I_B=0$	45	---
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	V	$I_C=10\mu\text{A}, I_E=0$	50	---
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	V	$I_E=10\mu\text{A}, I_C=0$	6	---
Collector cut-off Current	I_{CBO}	nA	$V_{CB}=30\text{V}, I_E=0$	---	15
Emitter cut-off Current	I_{EBO}	nA	$V_{EB}=4\text{V}, I_C=0$	---	15
DC Current Gain	h_{FE}		$I_C=2\text{mA}, V_{CE}=5\text{V}$	200	450
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	V	$I_C=10\text{mA}, I_B=0.5\text{mA}$	---	0.25
			$I_C=100\text{mA}, I_B=5\text{mA}$	---	0.65
Base-Emitter Voltage	V_{BE}	V	$V_{CE}=5\text{V}, I_C=2\text{mA}$	0.58	0.70
			$V_{CE}=5\text{V}, I_C=10\text{mA}$	---	0.77
Output Capacitance	C_{ob}	pF	$V_{CB}=10\text{V}, f=1.0\text{MHz}, I_E=0$	---	2(Typ)
Current Gain-Bandwidth Product	f_T	MHz	$I_C=20\text{mA}, V_{CE}=5\text{V}, f=100\text{MHz}$	—	200(Typ)

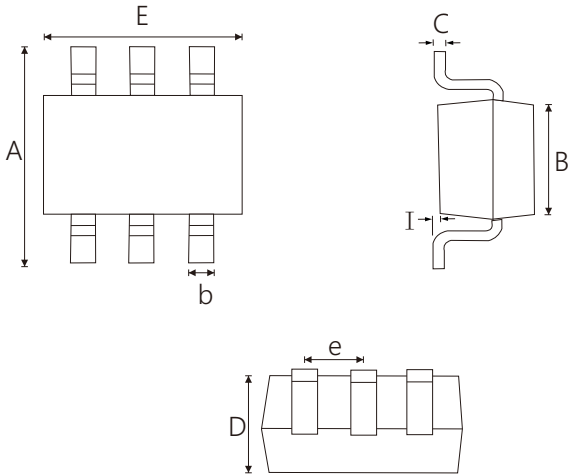
*Pulse measurement $PW \leq 350\mu\text{s}$, duty cycle $\leq 2.0\%$

Characteristics(Typical)



Outline Dimensions

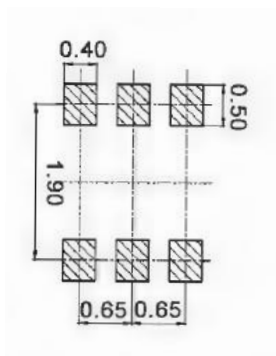
SOT-363



SOT363		
Dim	Min	Max
A	2.15	2.45
B	1.15	1.35
C	0.05	0.15
D	0.90	1.00
E	2.00	2.20
e	0.60	0.70
b	0.15	0.35
I	0.02	0.10

Dimensions in millimeters

Suggested pad layout



Note:
 1. Dimension: mm
 2. General tolerance: ± 0.05 mm
 3. The pad layout is for reference purposes only

Friendship Reminder

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