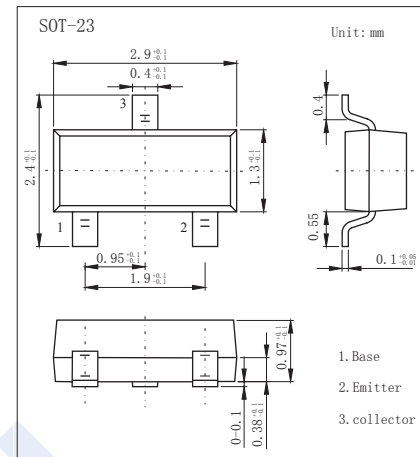


## NPN Transistors

### 2SC3624

#### ■ Features

- Collector Current Capability  $I_C=150\text{mA}$
- Collector Emitter Voltage  $V_{CE0}=50\text{V}$



#### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CB0}$	60	V
Collector - Emitter Voltage	$V_{CE0}$	50	
Emitter - Base Voltage	$V_{EB0}$	12	
Collector Current - Continuous	$I_C$	150	mA
Collector Power Dissipation	$P_C$	200	mW
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 to 150	

#### ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{CB0}$	$I_C = 100 \mu\text{A}$ , $I_E = 0$	60			V
Collector-emitter breakdown voltage	$V_{CE0}$	$I_C = 1 \text{mA}$ , $I_B = 0$	50			
Emitter - base breakdown voltage	$V_{EB0}$	$I_E = 100 \mu\text{A}$ , $I_C = 0$	12			
Collector-base cut-off current	$I_{CB0}$	$V_{CB} = 50\text{V}$ , $I_E = 0$			1	$\mu\text{A}$
Emitter cut-off current	$I_{EB0}$	$V_{EB} = 10\text{V}$ , $I_C = 0$			1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 50 \text{mA}$ , $I_B = 5 \text{mA}$			0.3	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 50 \text{mA}$ , $I_B = 5 \text{mA}$			1.2	
Base - emitter voltage	$V_{BE}$	$V_{CE} = 5\text{V}$ , $I_C = 1 \text{mA}$		0.56		
DC current gain	$h_{FE}$	$V_{CE} = 5\text{V}$ , $I_C = 1 \text{mA}$	1000		3200	
		$V_{CE} = 5\text{V}$ , $I_C = 100 \text{mA}$	200			
Turn-on time	$t_{on}$	$V_{CC} = 10\text{V}$ , $I_C = 50 \text{mA}$ ,		0.13		ns
Storage time	$t_{on}$	$I_{B1} = -I_{B2} = 1 \text{mA}$		0.72		
Fall time	$t_{stg}$	$V_{BE(off)} = -2.7\text{V}$		1.22		
Collector output capacitance	$C_{ob}$	$V_{CB} = 5\text{V}$ , $I_E = 0$ , $f = 1 \text{MHz}$		3		pF
Transition frequency	$f_T$	$V_{CE} = 5\text{V}$ , $I_E = -5 \text{mA}$		250		MHz

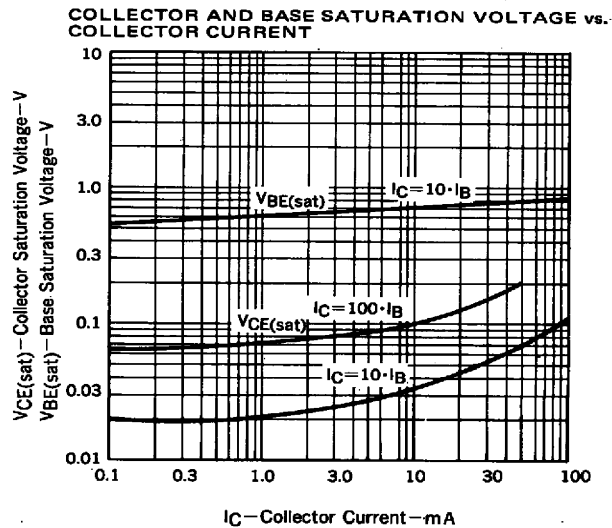
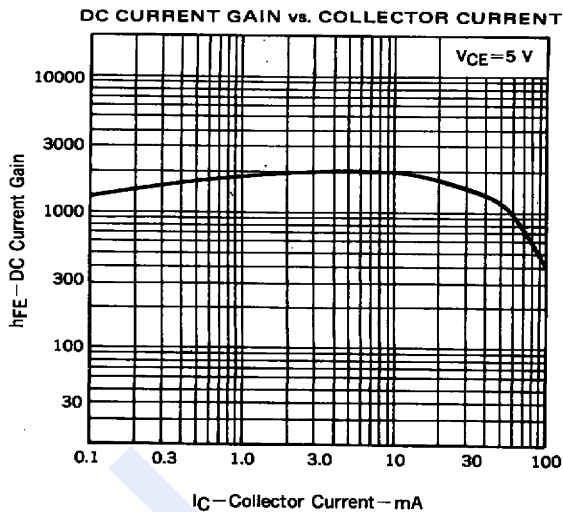
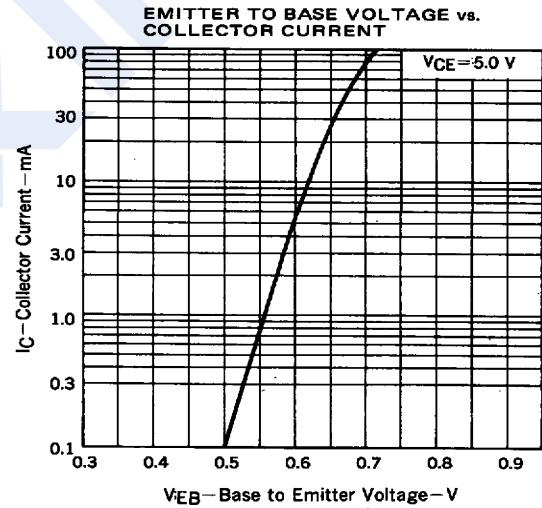
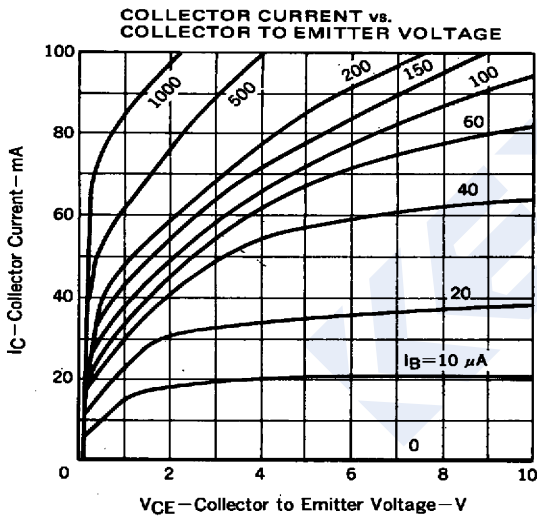
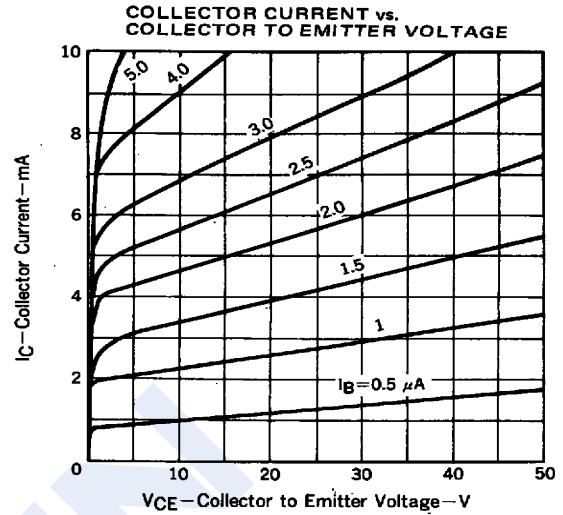
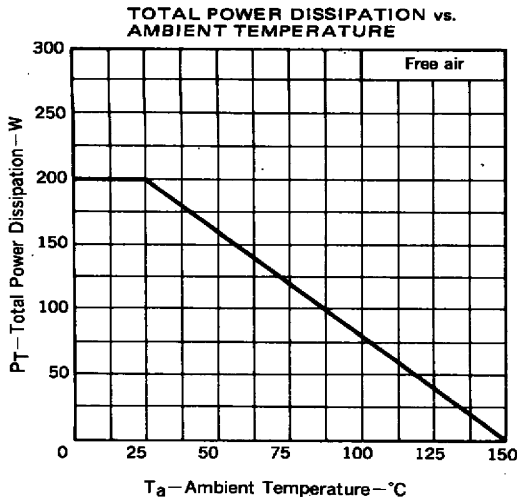
#### ■ Classification of $h_{fe}(1)$

Type	2SC3624-L17	2SC3624-L18
Range	1000-2000	1600-3200
Marking	L17	L18

# NPN Transistors

## 2SC3624

■ Typical Characteristics



## NPN Transistors

### 2SC3624

■ Typical Characteristics

