

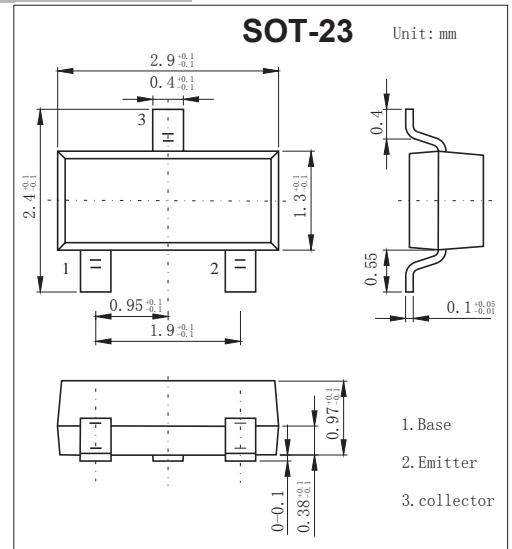
## SOT-23 Plastic-Encapsulate Transistors

### Features

- Collector Current Capability  $I_c=200\text{mA}$
- Collector Emitter Voltage  $V_{CE0}=15\text{V}$
- NPN Transistors

### MECHANICAL DATA

- Case style: SOT-23 molded plastic
- Mounting position: any



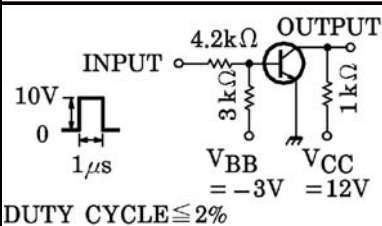
## MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CB0}$	40	V
Collector - Emitter Voltage	$V_{CE0}$	15	
Emitter - Base Voltage	$V_{EB0}$	5	
Collector Current - Continuous	$I_c$	200	mA
Base Current	$I_B$	40	
Collector Power Dissipation	$P_C$	150	mW
Junction Temperature	$T_J$	125	°C
Storage Temperature Range	$T_{stg}$	-55 to 125	

### PACKAGE INFORMATION

Device	Package	Shipping
2SC3437	SOT-23	3000/Tape&Reel

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	$V_{CB0}$	$I_c=100\mu\text{A}, I_E=0$	40			V
Collector- emitter breakdown voltage	$V_{CE0}$	$I_c=1\text{mA}, I_B=0$	15			
Emitter - base breakdown voltage	$V_{EB0}$	$I_E=100\mu\text{A}, I_c=0$	5			
Collector-base cut-off current	$I_{CBO}$	$V_{CB}=40\text{V}, I_E=0$			0.1	uA
Emitter cut-off current	$I_{EBO}$	$V_{EB}=5\text{V}, I_c=0$			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c=20\text{mA}, I_B=1\text{mA}$			0.3	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_c=20\text{mA}, I_B=1\text{mA}$			1	
DC current gain	$h_{FE}$	$V_{CE}=1\text{V}, I_c=10\text{mA}$	40		240	
		$V_{CE}=1\text{V}, I_c=100\text{mA}$	20			
Turn-on time	$t_{on}$			70		ns
Storage time	$t_{stg}$			15		
Fall time	$t_f$			30		
Collector output capacitance	$C_{ob}$	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$			6	pF
Transition frequency	$f_T$	$V_{CE}=10\text{V}, I_c=10\text{mA}$	200			MHz

### Classification of $h_{FE}(1)$

Type	2SC3437-R	2SC3437-O	2SC3437-Y
Range	40-80	70-140	120-240
Marking	CH R	CH O	CH Y

# RATINGS AND CHARACTERISTIC CURVES

## Typical Characteristics

