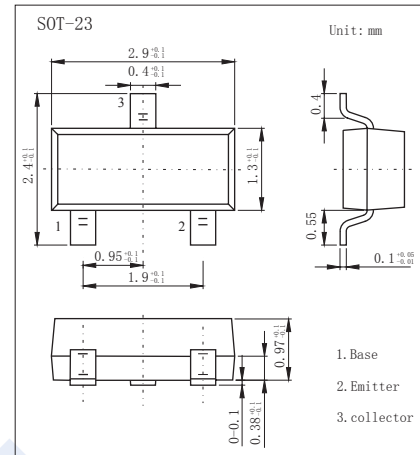


NPN Transistors

2SC2757

■ Features

- Collector Current Capability $I_C=50\text{mA}$
- Collector Emitter Voltage $V_{CEO}=15\text{V}$

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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	30	V
Collector - Emitter Voltage	V_{CEO}	15	
Emitter - Base Voltage	V_{EBO}	5	
Collector Current - Continuous	I_C	50	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_J	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to 125	

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	$I_C = 100\text{ }\mu\text{A}$, $I_E = 0$	30			V
Collector- emitter breakdown voltage	V_{CEO}	$I_C = 1\text{mA}$, $I_B = 0$	15			
Emitter - base breakdown voltage	V_{EBO}	$I_E = 100\text{ }\mu\text{A}$, $I_C = 0$	5			
Collector-base cut-off current	I_{CBO}	$V_{CB} = 25\text{V}$, $I_E = 0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5\text{V}$, $I_C = 0$			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 10\text{mA}$, $I_B = 1\text{mA}$			0.5	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 10\text{mA}$, $I_B = 1\text{mA}$			1.2	
DC current gain	h_{FE}	$V_{CE} = 5\text{V}$, $I_C = 10\text{mA}$	60		240	
Collector-base time constant	$C_{c\text{ rbb'}}$	$V_{CB} = 10\text{V}$, $I_C = 5\text{mA}$, $f = 31.9\text{MHz}$			15	ps
Collector output capacitance	C_{ob}	$V_{CB} = 10\text{V}$, $I_E = 0$, $f = 1\text{MHz}$			1.5	pF
Transition frequency	f_T	$V_{CE} = 10\text{V}$, $I_C = 5\text{mA}$	800			MHz

■ Classification of h_{FE}

Type	2SC2757-T32	2SC2757-T33	2SC2757-T34
Range	60-120	90-180	120-240
Marking	T32	T33	T34