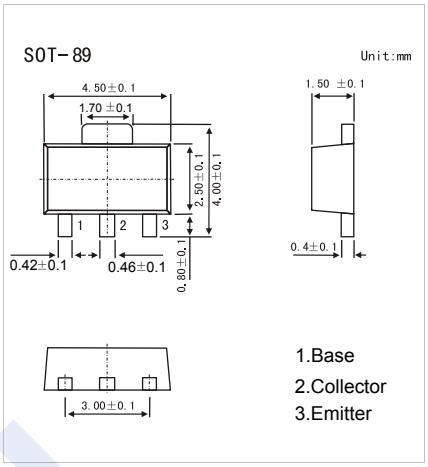
NPN Transistors

2SC4375



■ Features

- Collector Current Capability I_C=1.5 A
- Collector Emitter Voltage V_{CEO}=30 V

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	30	V
Collector - Emitter Voltage	V_{CEO}	30	
Emitter - Base Voltage	V_{EBO}	5	
Collector Current - Continuous	I_C	1.5	A
Collector Power Dissipation	P_C	500	mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	250	℃/W
Junction Temperature	T_J	150	℃
Storage Temperature Range	T_{stg}	-55 to 150	

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	I_C= 1 mA, I_E= 0	30			V
Collector- emitter breakdown voltage	V_{CEO}	I_C= 10 mA, I_B= 0	30			
Emitter - base breakdown voltage	V_{EBO}	I_E= 1 mA, I_C= 0	5			
Collector-base cut-off current	I_{CBO}	V_{CB}= 30 V , I_E= 0			0.1	uA
Emitter cut-off current	I_{EBO}	V_{EB}= 5V , I_C=0			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=1.5 A, I_B=30mA			2	V
Base - emitter saturation voltage	$V_{BE(sat)}$	I_C=1.5 A, I_B=30mA			1.2	
Base - emitter voltage	V_{BE}	V_{CE}= 2V, I_C= 500mA			1	
DC current gain	h_{FE}	V_{CE}= 2V, I_C= 500mA	100		320	
Collector output capacitance	C_{ob}	V_{CB}= 10V, I_E= 0,f=1MHz			40	pF
Transition frequency	f_T	V_{CE}= 2V, I_C= 0.5 A		120		MHz

■ Classification of h_{fe}

Type	2SC4375-O	2SC4375-Y
Range	100-200	160-320
Marking	GO	GY