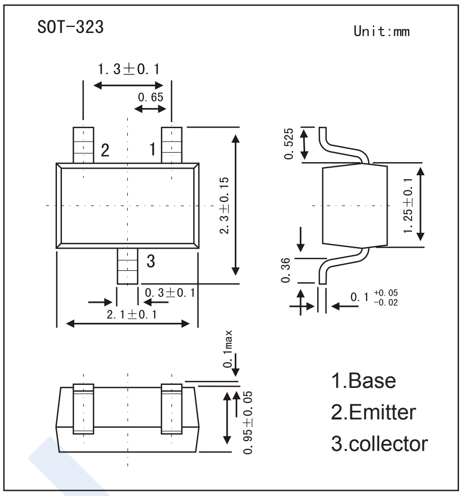
NPN Transistors

KTC4076



■ Features

- ● Excellent hFE Linearity
- ● Complementary to KTA2015

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	35	V
Collector - Emitter Voltage	V_{CEO}	30	
Emitter - Base Voltage	V_{EBO}	5	
Collector Current - Continuous	I_C	500	mA
Base Current	I_B	50	
Collector Power Dissipation	P_C	100	mW
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= 100uA， I_E= 0		35			V
Collector- emitter breakdown voltage	V_{CEO}	I_C= 1 mA，I_B=0		30			
Emitter - base breakdown voltage	V_{EBO}	I_E= 100uA， I_C= 0		5			
Collector-base cut-off current	I_{CBO}	V_{CB}= 35V , 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=100mA, I_B=10mA				0.25	V
Base - emitter saturation voltage	$V_{BE(sat)}$	I_C=100mA, I_B=10mA				1.2	
Base - emitter voltage	V_{BE}	V_{CE}= 1V, I_C=100mA				1	
DC current gain	h_{FE}	V_{CE}= 1V, I_C=100mA		70		240	
		V_{CE}= 6V, I_C=400mA	O	25			
			Y	40			
Collector output capacitance	C_{ob}	V_{CB}= 6V,I_E=0,f=1MHz			7		pF
Transition frequency	f_T	V_{CE}= 6V, I_C= 20mA			300		MHz

■ Classification of hfe

Type	KTC4076-O	KTC4076-Y
Range	70-140	120-240
Marking	WO	WY