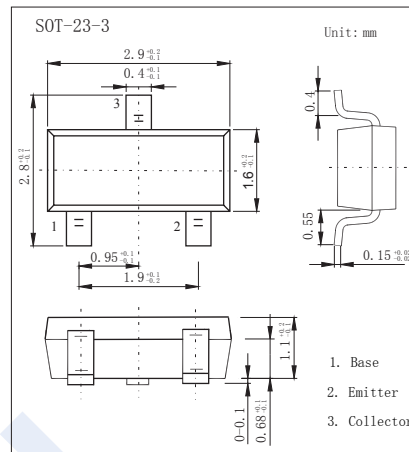


NPN Transistors

KTC3876 (KTC3876S)

■ Features

- Excellent hFE Linearity
- Complementary to KTA1505/KTA1505S



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

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	150	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_{CBO}	$I_C = 100\mu\text{A}$, $I_E = 0$	35			V
Collector- emitter breakdown voltage	V_{CEO}	$I_C = 1\text{ mA}$, $I_B = 0$	30			
Emitter - base breakdown voltage	V_{EBO}	$I_E = 100\mu\text{A}$, $I_C = 0$	5			
Collector-base cut-off current	I_{CBO}	$V_{CB} = 35\text{ V}$, $I_E = 0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5\text{ V}$, $I_C = 0$			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 100\text{ mA}$, $I_B = 10\text{ mA}$			0.25	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 100\text{ mA}$, $I_B = 10\text{ mA}$			1.2	
Base - emitter voltage	V_{BE}	$V_{CE} = 1\text{ V}$, $I_C = 100\text{ mA}$			1	
DC current gain	h_{FE}	$V_{CE} = 1\text{ V}$, $I_C = 100\text{ mA}$	70		400	
		$V_{CE} = 6\text{ V}$, $I_C = 400\text{ mA}$	25			
			40			
Collector output capacitance	C_{ob}	$V_{CB} = 6\text{ V}$, $I_E = 0$, $f = 1\text{ MHz}$		7		pF
Transition frequency	f_T	$V_{CE} = 6\text{ V}$, $I_C = 20\text{ mA}$		300		MHz

■ Classification of $h_{FE}(1)$

Type	KTC3876-O	KTC3876-Y	KTC3876-G
Range	70-140	120-240	200-400
Marking	WO	WY	WG