KTC3876 TRANSISTOR (NPN)

1.BASE
2.COLLECTOR
3.EMITTER

SOT-23-3

FEATURES

- High hFE
- Complementary to KTA1505

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	35	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	500	mA
P_C	Collector Power Dissipation	200	mW
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55-150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions		Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100 μ A, I_E=0		35			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C= 1mA, I_B=0		30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E= 100 μ A, I_C=0		5			V
Collector cut-off current	I_{CBO}	V_{CB}= 35V, I_E=0				0.1	μ A
Emitter cut-off current	I_{EBO}	V_{EB}= 5V, I_C=0				0.1	μ A
DC current gain	h_{FE1}	V_{CE}=1V, I_C= 100mA		70		400	
	h_{FE2}	V_{CE}=6V, I_C= 400mA	O	25			
			Y	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=100mA, I_B= 10mA				0.25	V
base-emitter voltage	V_{BE}	V_{CE}=1V, I_B= 100mA				1	V
Transition frequency	f_T	V_{CE}=6V, I_C=20mA			300		MHz
Collector output capacitance	C_{ob}	V_{CB}=6V,I_E=0,f=1MH$_Z$			7		pF

CLASSIFICATION OF h_{FE}

Rank	O	Y	GR(G)
Range	70-140	120-240	200-400
Marking	WO	WY	WG