

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURE

- High h_{FE}
- Complementary to KTA1505

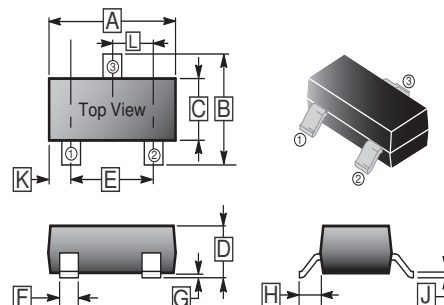
CLASSIFICATION OF h_{FE}

Product-Rank	KTC3876-O	KTC3876-Y	KTC3876-GR
Range	70~140	120~240	200~400
Marking Code	WO	WY	WG

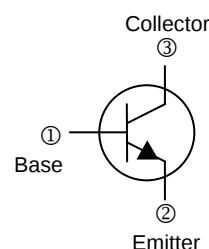
PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-23	3K	7 inch

SOT-23



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.80	3.04	G	0.09	0.18
B	2.10	2.55	H	0.45	0.60
C	1.20	1.40	J	0.08	0.177
D	0.89	1.15	K	0.6	REF.
E	1.78	2.04	L	0.89	1.02
F	0.30	0.50			



ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	V_{CBO}	35	V
Collector to Emitter Voltage	V_{CEO}	30	V
Emitter to Base Voltage	V_{EBO}	5	V
Collector Current - Continuous	I_C	500	mA
Collector Power Dissipation	P_C	200	mW
Junction, Storage Temperature	T_J, T_{STG}	150, -55 ~ 150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	35	-	-	V	$I_C=100\mu\text{A}, I_E=0$
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	30	-	-	V	$I_C=1\text{mA}, I_B=0$
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	5	-	-	V	$I_E=100\mu\text{A}, I_C=0$
Collector Cut-Off Current	I_{CBO}	-	-	0.1	μA	$V_{CB}=35\text{V}, I_E=0$
Emitter Cut-Off Current	I_{EBO}	-	-	0.1	μA	$V_{EB}=5\text{V}, I_C=0$
DC Current Gain	$h_{FE(1)}$	70	-	400		$V_{CE}=1\text{V}, I_C=100\text{mA}$
	$h_{FE(2)}$	25				$V_{CE}=6\text{V}, I_C=400\text{mA}$
		40				
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	0.25	V	$I_C=100\text{mA}, I_B=10\text{mA}$
Base to Emitter Saturation Voltage	V_{BE}	-	-	1	V	$I_B=100\text{mA}, V_{CE}=1\text{V}$
Transition Frequency	f_T	-	300	-	MHz	$V_{CE}=6\text{V}, I_C=20\text{mA}$
Collector output capacitance	C_{ob}	-	7	-	pF	$V_{CB}=6\text{V}, I_E=0, f=1\text{MHz}$

CHARACTERISTIC CURVES

