

### FEATURES

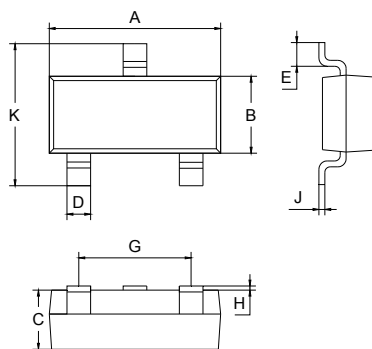
- Complementary To KTA1504.
- Excellent  $h_{FE}$  Linearity.
- Low noise.

### APPLICATIONS

- General purpose application, switching application.

### ORDERING INFORMATION

Type No.	Marking	Package Code
KTC3875	ALO/ALY/ALG/ALL	SOT-23



SOT-23		
Dim	Min	Max
A	2.70	3.10
B	1.10	1.50
C	1.0 Typical	
D	0.4 Typical	
E	0.35	0.48
G	1.80	2.00
H	0.02	0.1
J	0.1 Typical	
K	2.20	2.60
All Dimensions in mm		

### MAXIMUM RATING @ $T_a=25^\circ\text{C}$ unless otherwise specified

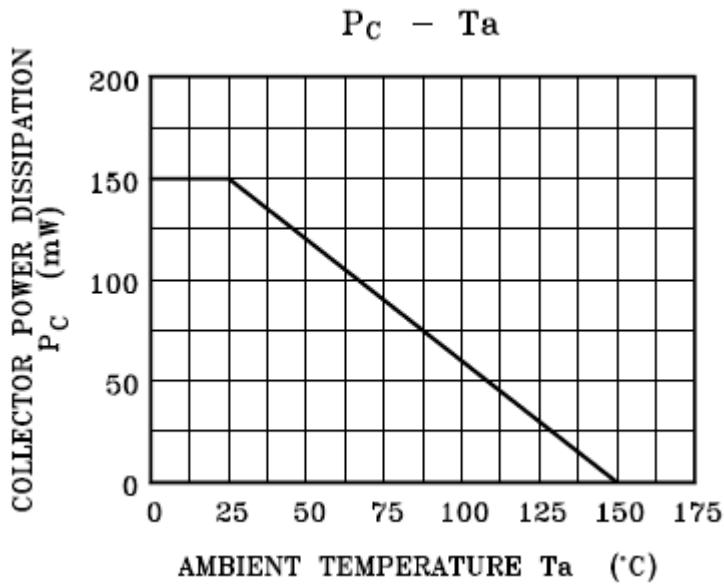
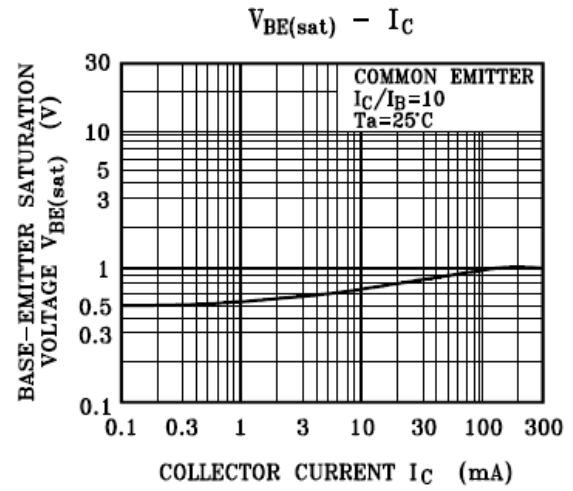
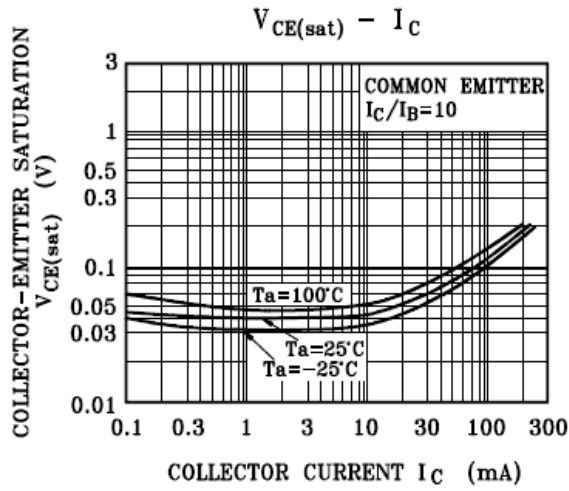
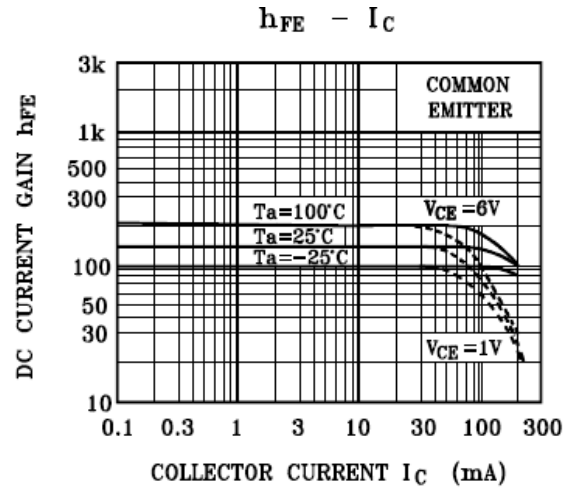
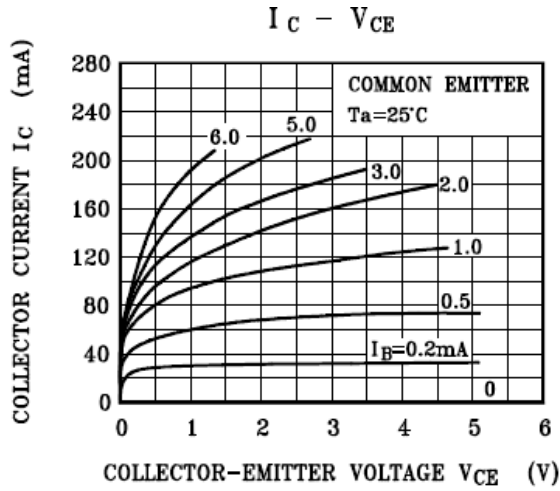
Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	60	V
$V_{CEO}$	Collector-Emitter Voltage	50	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current -Continuous	150	mA
$I_B$	Base Current	30	mA
$P_C$	Collector Power Dissipation	150	mW
$T_j, T_{stg}$	Junction and Storage Temperature	-55 to +150	$^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu\text{A}, I_E=0$	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, I_B=0$	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu\text{A}, I_C=0$	5			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=60\text{V}, I_E=0$			0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=5\text{V}, I_C=0$			0.1	$\mu\text{A}$
DC current gain	$h_{FE}$	$V_{CE}=6\text{V}, I_C=2\text{mA}$	70		700	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=100\text{mA}, I_B=10\text{mA}$		0.1	0.25	V
Transition frequency	$f_T$	$V_{CE}=10\text{V}, I_C=1\text{mA}$	80			MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$		2.0	3.5	pF
Noise figure	NF	$V_{CE}=6\text{V}, I_C=0.1\text{mA}, F=1\text{KHz}, R_G=10\text{K}\Omega$		1.0	10	dB

### CLASSIFICATION OF $h_{FE}$

Rank	O	Y	GR	BL
Range	70-140	120-240	200-400	350-700
Marking	ALO	ALY	ALG	ALL

**TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**


Device	Package	Shipping
KTC3875	SOT-23	3000/Tape&Reel