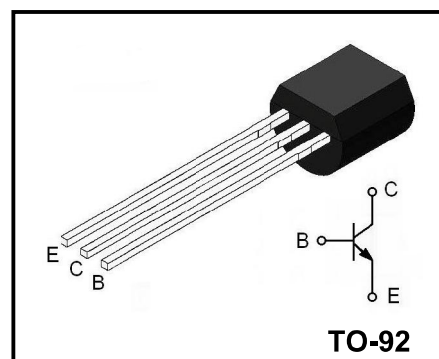


PNP Plastic-Encapsulate Transistors

High Current Applications

Features

- High current output up to -2A.
- Complement to KTC3205



Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	BV_{CBO}	-30	V
Collector-Emitter Voltage	BV_{CEO}	-30	V
Emitter-Base Voltage	BV_{EBO}	-5	V
Collector Current	I_C	-2	A
Collector Power Dissipation	P_C	0.625	W
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55~+150	°C

Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	BV_{CBO}	$I_C = -1mA, I_E = 0$	40			V
Collector-emitter breakdown voltage	BV_{CEO}	$I_C = -10mA, I_B = 0$	30			V
Emitter-base breakdown voltage	BV_{EBO}	$I_E = -1mA, I_C = 0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -30V, I_E = 0$			-100	nA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5V, I_C = 0$			-100	nA
DC current gain	h_{FE1}	$V_{CE} = -2V, I_C = -500mA$	100		320	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -1.5A, I_B = -0.03A$			-2.0	V
Base -emitter saturation voltage	V_{BE}	$V_{CE} = -2V, I_C = -500mA$			-1.0	V
Transition frequency	f_T	$V_{CE} = -2V, I_C = -500mA$		120		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$		48		pF

h_{FE} Classification

Classification	KTA1273-O	KTA1273-Y
Range	100~200	160~320

Typical Characteristics

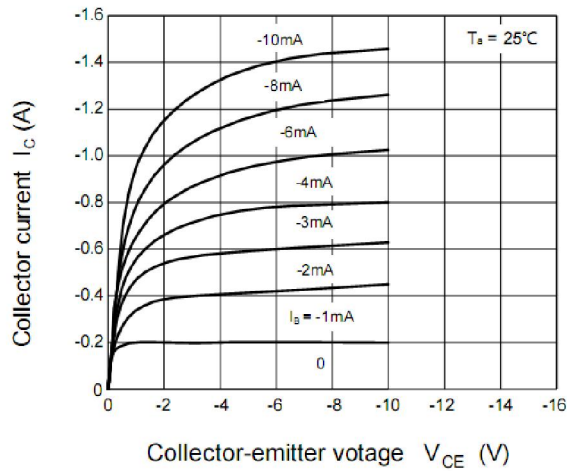


Fig.1 Static characteristics

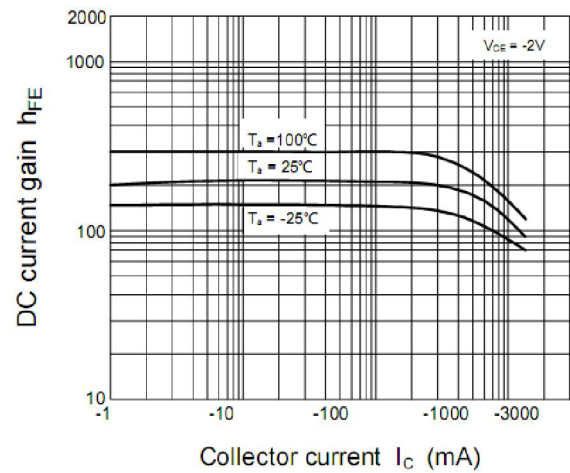


Fig.2 DC Current Gain

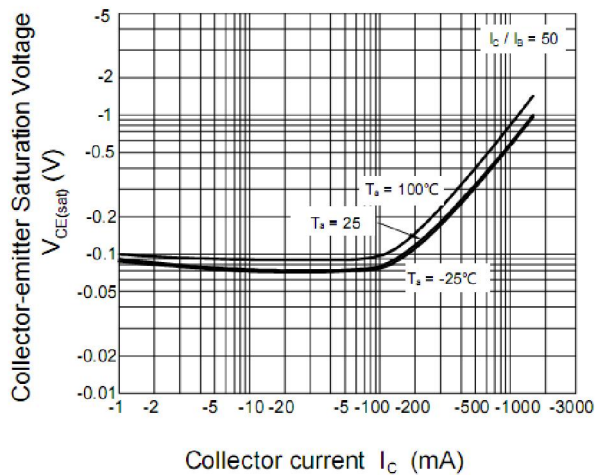


Fig.3 Collector-emitter Saturation Voltage

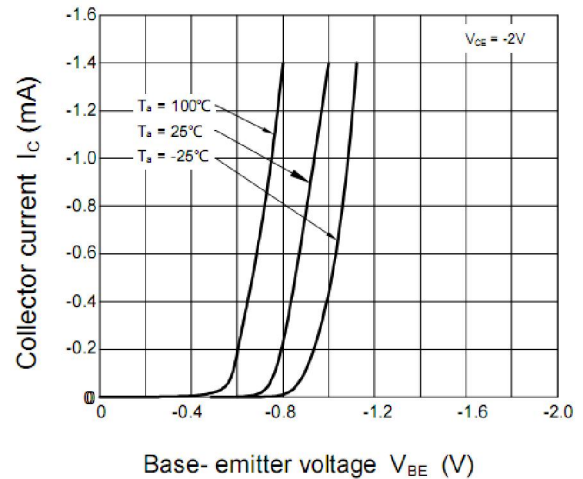


Fig.4 Safe Operating Area

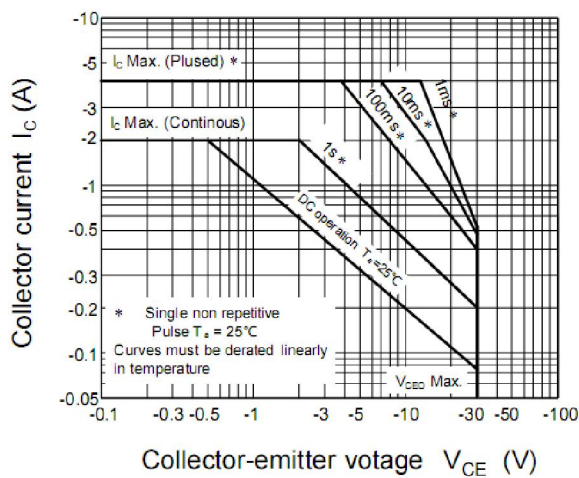


Fig.5 Safe Operating Area

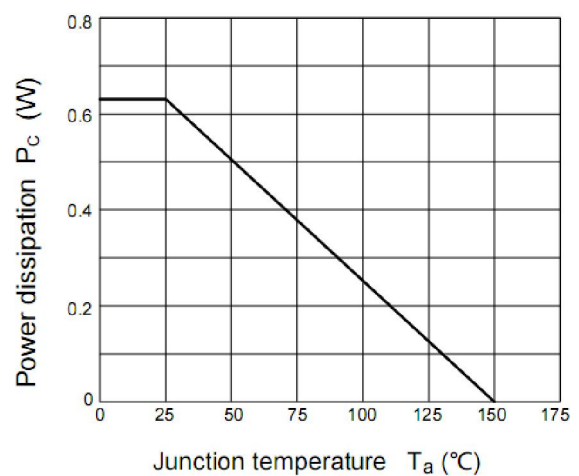


Fig.6 Power Derating

Package Dimensions

TO-92

Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	3.30	3.70	0.130	0.146
A1	2.30	2.70	0.091	0.106
b	0.40	0.50	0.016	0.020
b1	0.50	0.70	0.020	0.028
c	0.35	0.45	0.014	0.018
D	4.45	4.70	0.175	0.185
E	4.40	4.65	0.173	0.183
e	1.17	1.37	0.046	0.054
e1	2.34	2.64	0.092	0.104
L	13.50	14.50	0.531	0.571
L1	1.80	2.20	0.071	0.087

Package	Packing Method	Pack Quantity
TO-92	Bulk	1000pcs/Bag
TO-92	Tape	2000pcs/Box