

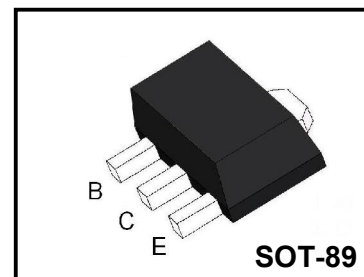
PNP Plastic-Encapsulate Transistors

High Current Applications

Features

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

Marking : A1273 0
A1273 Y



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	0.5	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

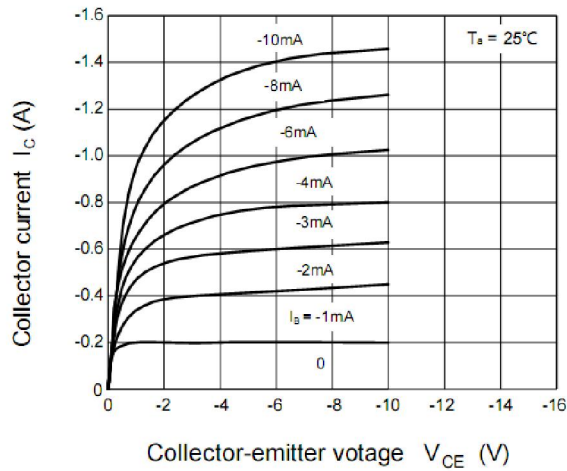


Fig.1 Static characteristics

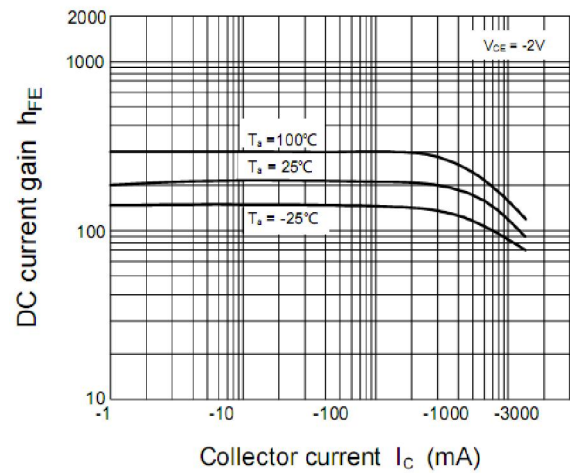


Fig.2 DC Current Gain

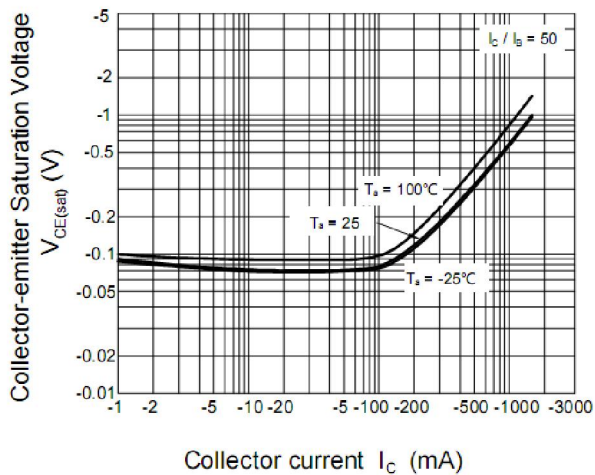


Fig.3 Collector-emitter Saturation Voltage

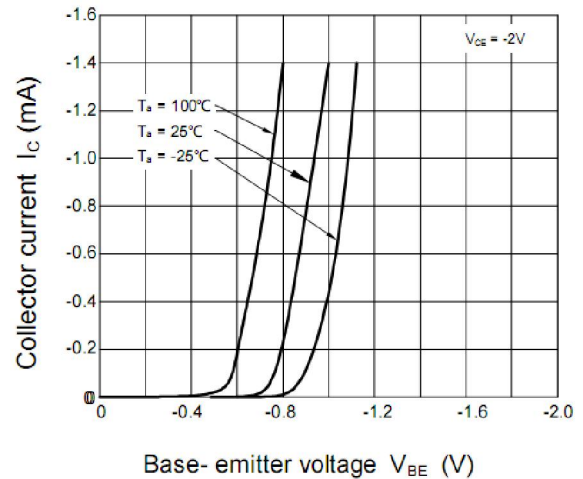


Fig.4 Safe Operating Area

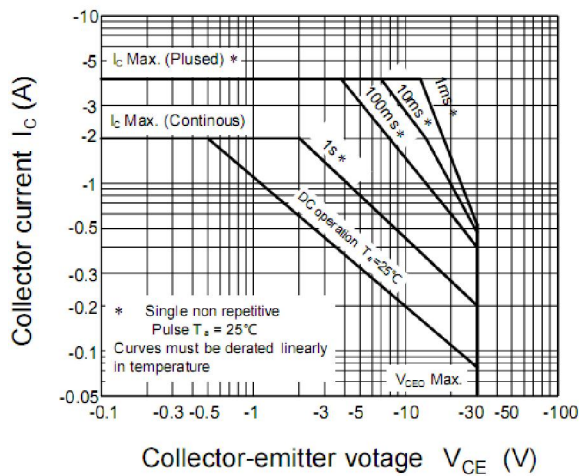


Fig.5 Safe Operating Area

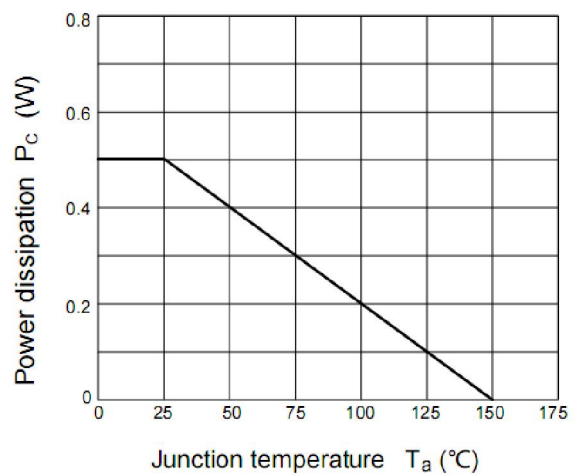
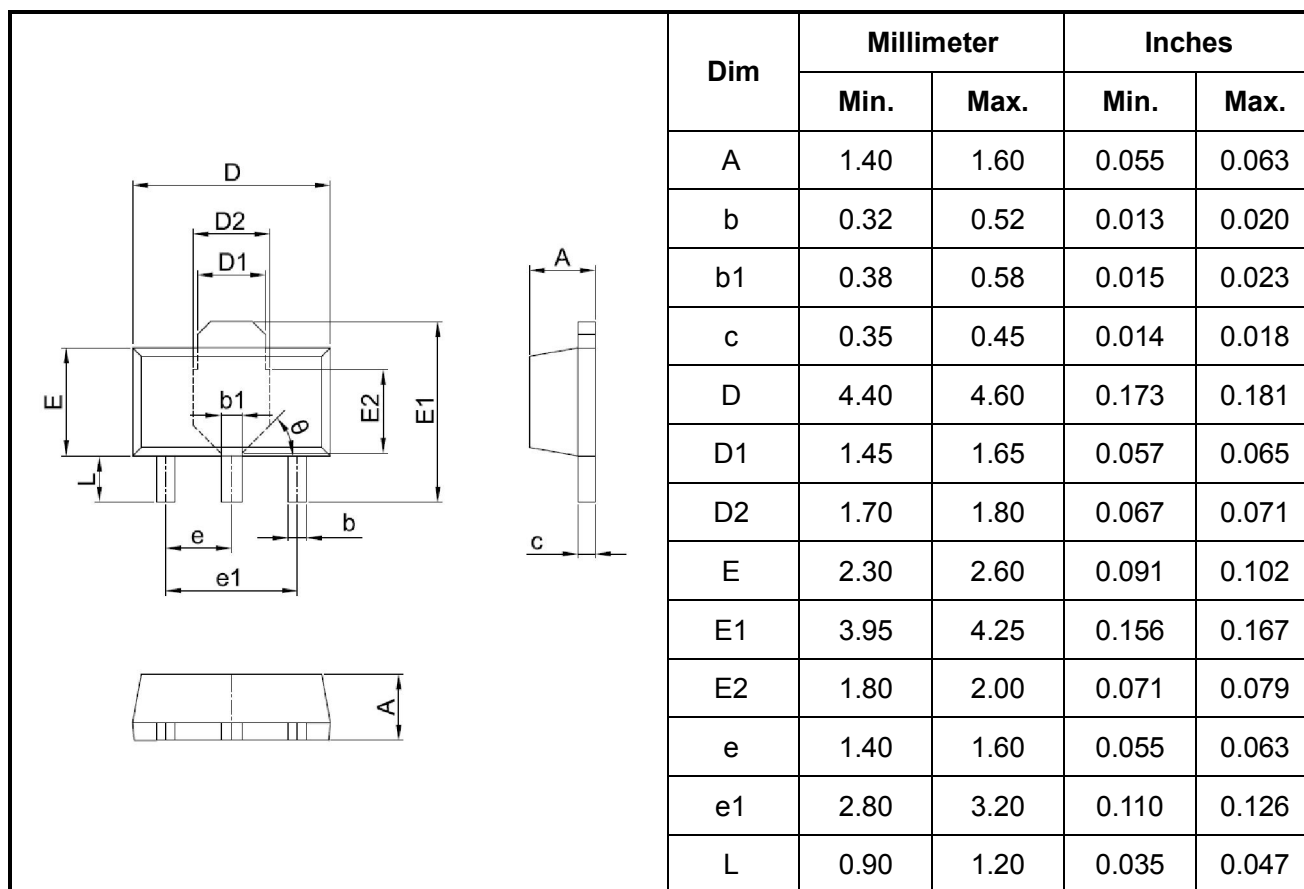


Fig.6 Power Derating

Package Outline

SOT-89



Summary of Packing Options

Package	Package Description	Packing Quantity	Industry Standard
SOT-89	Tape/Reel, 7" reel	1000	EIA-481-1