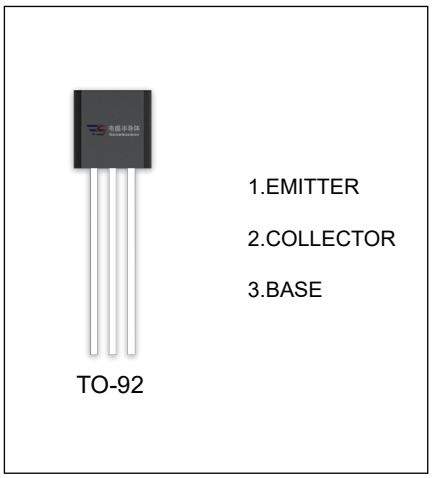
2SA1300

42AN3)34/2 (0N0)



FEATURES

- (IGH $C CURRENT GAIN AND EXCELLENT $H_{\&E}$ LINEARITY
- LOW SATURATION VOLTAGE

ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
2SA1300	TO-92	Bulk	1000pcs/Bag
2SA1300-TA	TO-92	Tape	2000pcs/Box

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-20	V
V_{CEO}	Collector-Emitter Voltage	-10	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current -Continuous	-2	A
P_D	Collector Power Dissipation	750	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	166	℃ /W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	℃

T_a=25℃ unless otherwise specified

Parameter	3 YMBOL	TEST CONDItions	Min	4yp	Max	Unit
Collector-base breakdown voltage	$6_{(B2)CB/}$	$)_C$=-1MA , $)_E$=0	-20			6
Collector-emitter breakdown voltage	$6_{(B2)CE/}$	$)_C$=-10MA , $)_B$=0	-10			6
Emitter-base breakdown voltage	$6_{(B2)EB/}$	$)_E$=-1MA, $)_C$=0	-6			6
Collector cut-off current	$)_{CB/}$	6_{CB}=-206 , $)_E$=0			-0.1	±A
Emitter cut-off current	$)_{EB/}$	6_{EB}=-66,Ic=0			-0.1	±A
DC current gain	$H_{\&E}$	6_{CE}=-16, $)_C$=-0.5A	140		600	
Collector-emitter saturation voltage	$6_{CE(SAT)}$	$)_C$=-2A, $)_B$= -100MA			-0.82	6
Base-emitter voltage	6_{BE}	$)_C$= -2A, 6_{CE}=-16			-1.5	6
Transition frequency	F_4	6_{CE}=-16, $)_C$= -0.5A F = 30M(Z		140		M(Z
Collector Output Capacitance	COB	6_{CB}=-106,)E=0 F=1M(:		50		pF

CLASSIFICATION OF h_{FE}

Rank	9	G2	BL
Range	140-280	200-400	300-600