

2SD2908

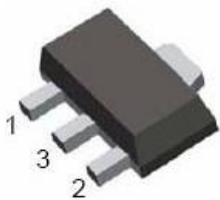
Low VCE(sat) transistor(80V,0.7A)

Features

- Low VCE(sat).
- Excellent DC current gain characteristics.
- Complements the 2SB1386
- RoHS compliant package

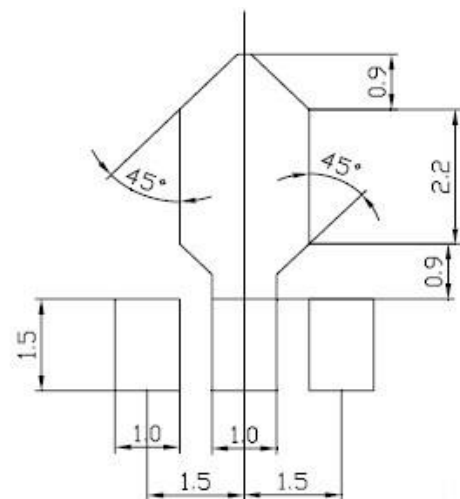
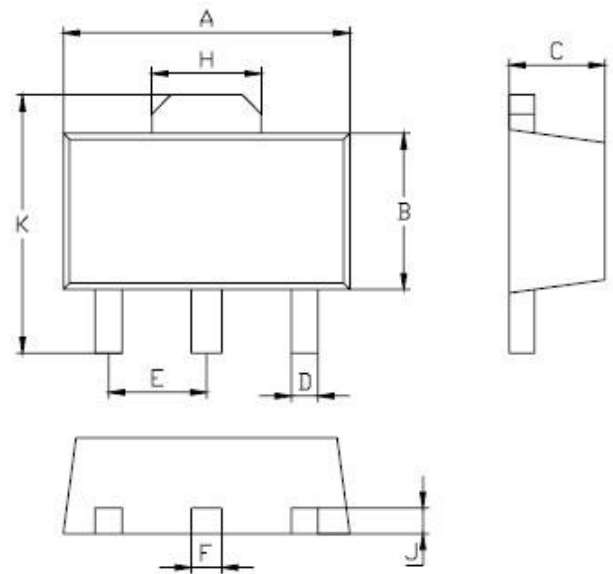
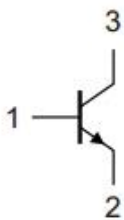
Packing & Order Information

3,000/Reel



RoHS
COMPLIANT

Graphic symbol



SOT-89		
Dim	Min	Max
A	4.5	4.7
B	2.3	2.7
C	1.5Typical	
D	0.35	0.55
E	1.4	1.6
F	0.4	0.6
H	1.55	1.75
J	0.4Typical	
K	4.15	4.25
All Dimensions in mm		

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MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	50	V
V_{CEO}	Collector-Emitter Voltage	20	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current	5	A
P_C	Collector Dissipation	500	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

Symbol	Parameter	Test Conditions	MIN	TYP	MAX	UNIT
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C = 50\mu\text{A}$, $I_E = 0$	50			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C = 1\text{ mA}$, $I_B = 0$	20			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E = 50\mu\text{A}$, $I_C = 0$	6			V
I_{CBO}	Collector cut-off current	$V_{CB} = 40\text{ V}$, $I_E = 0$			0.5	μA
I_{EBO}	Emitter cut-off current	$V_{EB} = 5\text{ V}$, $I_C = 0$			0.5	μA
h_{FE}	DC current gain	$V_{CE} = 2\text{ V}$, $I_C = 0.5\text{ A}$	120		390	
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_C = 4\text{ A}$, $I_B = 0.1\text{ A}$		0.25	1.0	V
f_T	Transition frequency	$V_{CE} = 6\text{ V}$, $I_C = 50\text{ mA}$ $f = 100\text{ MHz}$		150		MHz
C_{ob}	Collector output capacitance	$V_{CB} = 20\text{ V}$, $I_E = 0$ $f = 1.0\text{ MHz}$		30		pF

CLASSIFICATION OF h_{FE}

Marking	AHQ	AHR
Rank	Q	R
Range	120-270	180-390

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

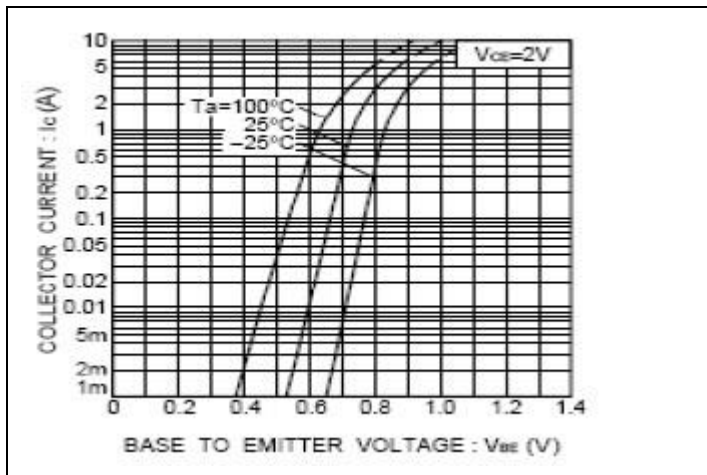


FIG.1- GROUNDED EMITTER PROPAGATION CHARACTERISTICS

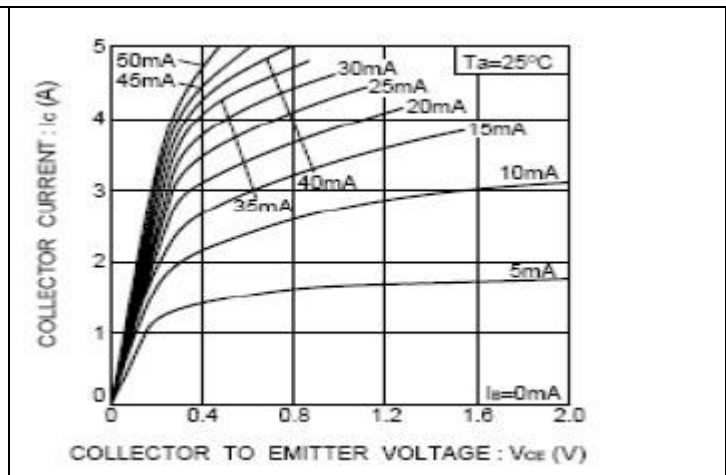


FIG.2- GROUNDED EMITTER OUTPUT CHARACTERISTICS

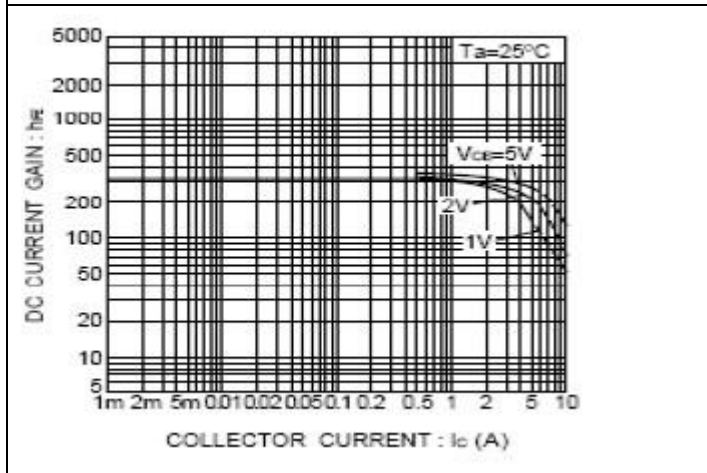


FIG.3- DC CURRENT GAIN VS. COLLECTOR CURRENT(I)

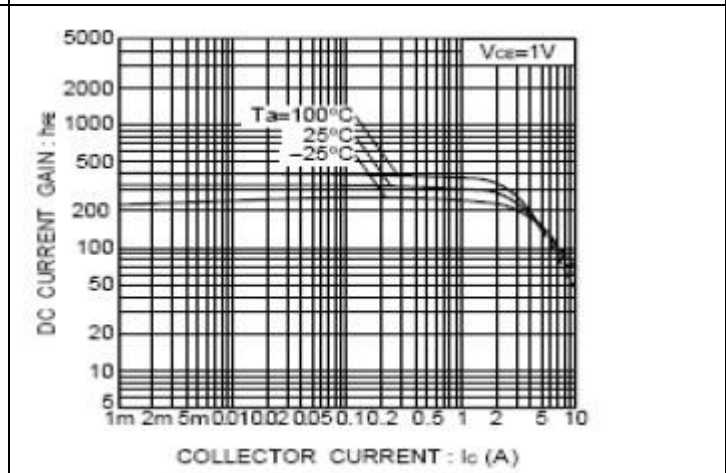


FIG.4- DC CURRENT GAIN VS. COLLECTOR CURRENT(II)

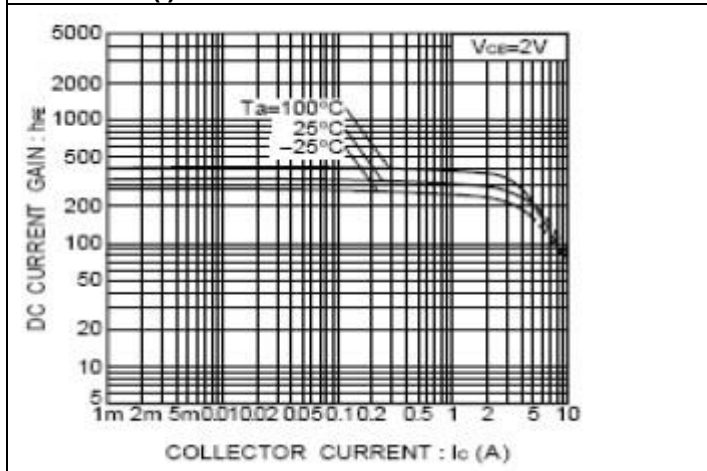


FIG.5- DC CURRENT GAIN VS. COLLECTOR CURRENT(III)

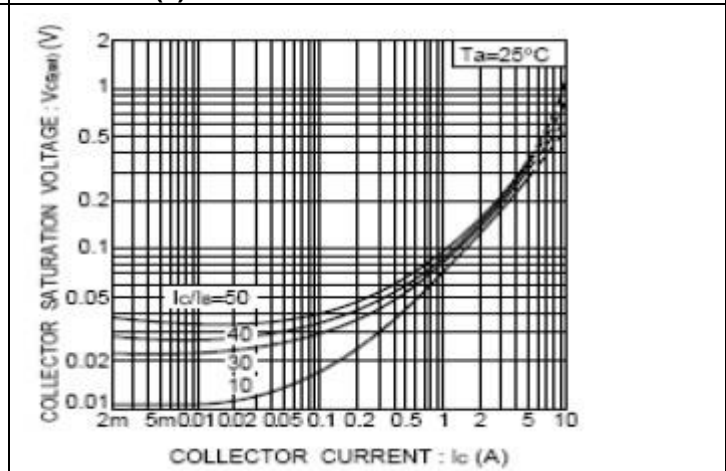


FIG.6- COLLECTOR EMITTER SATURATION VOLTAGE VS. COLLECTOR CURRENT(I)

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