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PNP Silicon Epitaxial Planar Transistor

Features

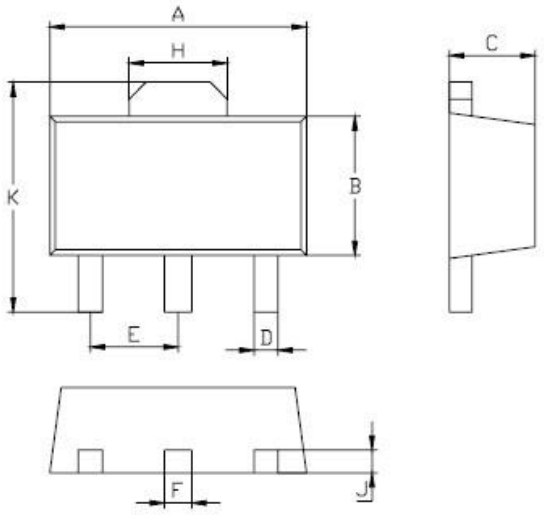
- PCM=0.5W(Tamb=25°C)
- High voltage.
- Complementary: A42
- RoHS compliant package

Applications

- Designed for high voltage driver application.

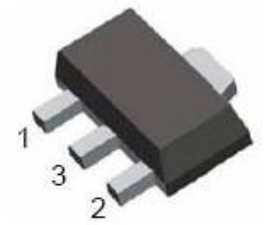
Mechanical Data

- Case: SOT-89

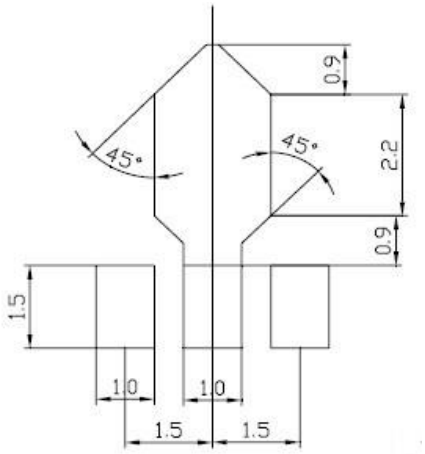


Packing & Order Information

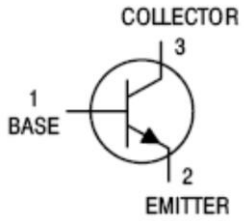
1,000/Reel



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

Absolute maximum ratings (Ta=25°C)			
Symbol	**Parameter**	**Value**	**Unit**
V_{CBO}	Collector-Base Voltage	-300	V
V_{CEO}	Collector-Emitter Voltage	-300	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-0.5	A
P_C	Collector Power Dissipation	500	mW
Tj,Tstg	Junction and Storage Temperature	-55 to 150	°C

ELECTRICAL CHARACTERISTICS @ Ta=25˚C unless otherwise specified						
Symbol	**Parameter**	**Test Conditions**	**MIN**	**TYP**	**MAX**	**UNIT**
$V_{(BR)CBO}$	Collector-base breakdown voltage	I_C = -100μA , I_E = 0	-300			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	I_C = -1 mA , I_B = 0	-300			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	I_E = -100μA , I_C = 0	-5			V
I_{CBO}	Collector cut-off current	V_{CB} = -200 V , I_B = 0			-0.25	μA
I_{EBO}	Emitter cut-off current	V_{EB} = -3 V , I_C = 0			-0.1	μA
h_{FE}	DC current gain	V_{CE} = -10 V , I_C = -1 mA	60			
		V_{CE} = -10 V , I_C = -10 mA	100	300		
		V_{CE} = -10 V , I_C = -30 mA	60			
$V_{CE(sat)}$	Collector-emitter saturation voltage	I_C = -20 mA , I_B = -2 mA			-0.5	V
$V_{BE(sat)}$	Base-emitter saturation voltage	I_C = -20 mA , I_B = -2 mA			-0.9	V
f_T	Transition frequency	V_{CE} = -20 V , I_C = -10 mA f = 100MHz		50		MHz
C_{ob}	Collector output capacitance	V_{CB}= -20V , I_E = 0 f = 1MHz		6		pF

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■Typical Characteristics

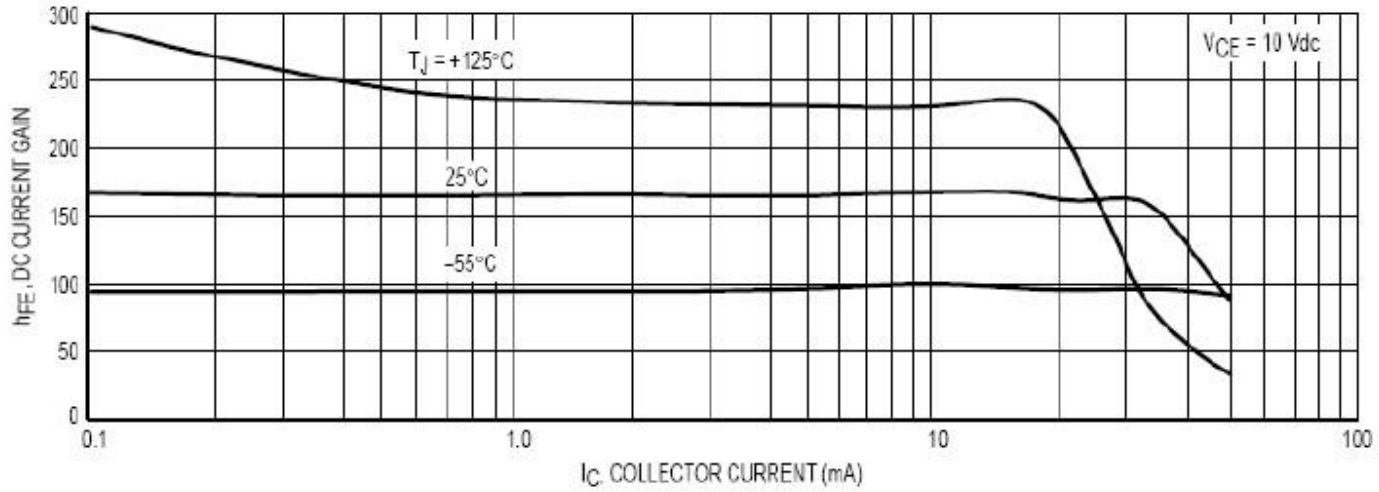

FIG.1 - DC CURRENT GAIN

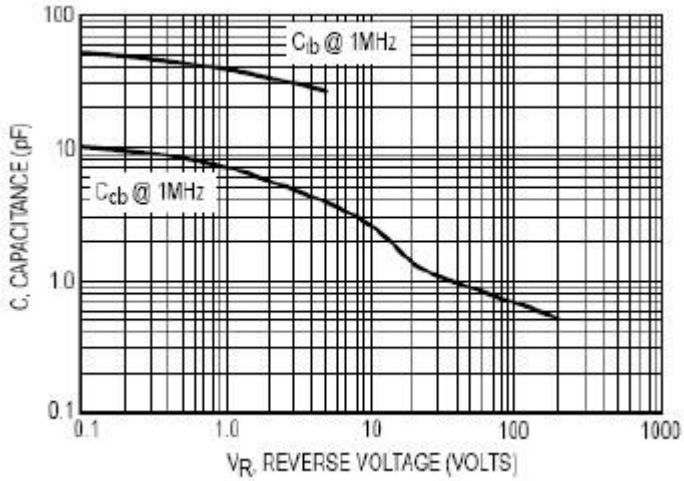

FIG.2 - CAPACITANCE

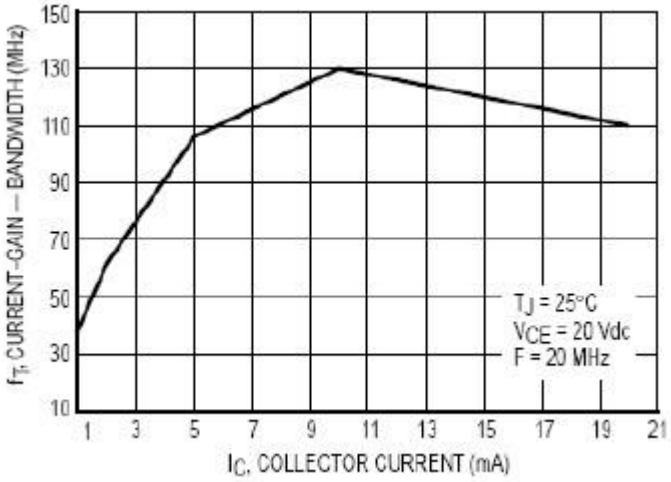

FIG.3 - CURRENT-GAIN-BANDWIDTH

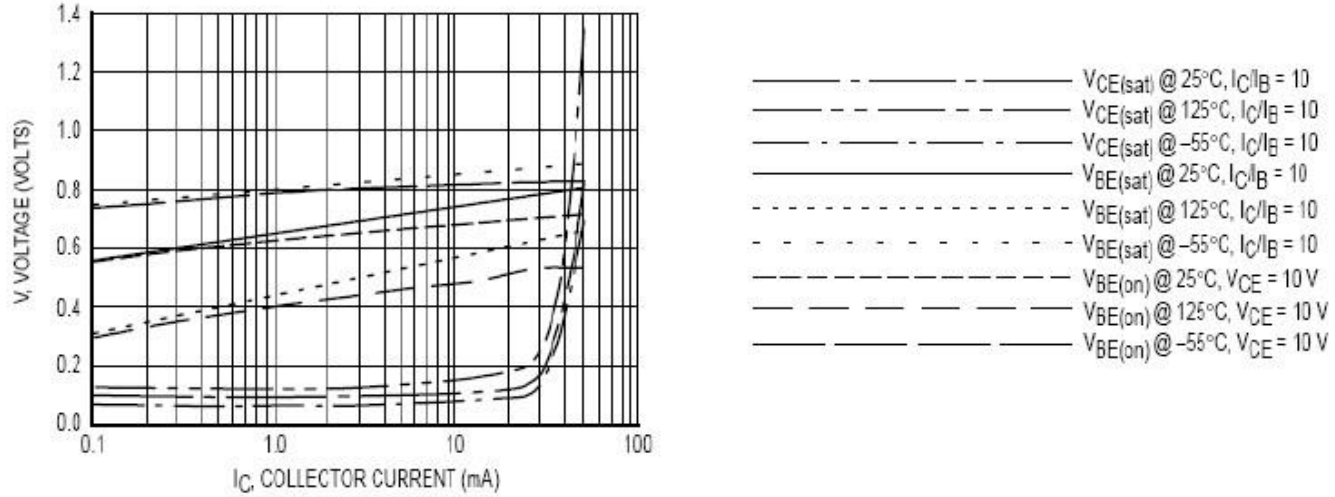

FIG.4 - "ON" VOLTAGES

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