

Silicon PNP Power Transistor

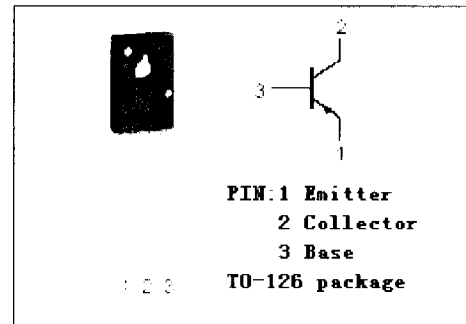
2SB1217

DESCRIPTION

- High Collector Current $-I_C = -3A$
- Collector-Emitter Breakdown Voltage-
 $V_{(BR)CEO} = -60V(\text{Min})$
- Good Linearity of h_{FE}
- Low Saturation Voltage
- Complement to Type 2SD1818

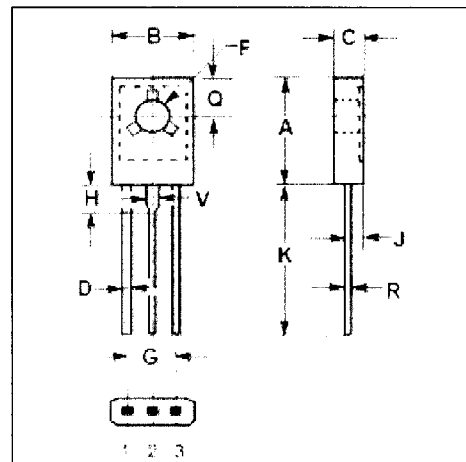
APPLICATIONS

- Designed for use in DC-DC converter, driver, solenoid and motor .

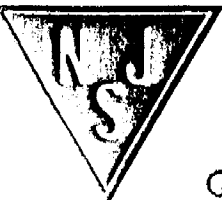


ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ C$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-60	V
V_{EBO}	Emitter-Base Voltage	-7	V
I_C	Collector Current-Continuous	-3	A
I_{CP}	Collector Current-Pulse	-5	A
I_B	Base Current-Continuous	-0.5	A
P_C	Collector Power Dissipation @ $T_C=25^\circ C$	10	W
	Collector Power Dissipation @ $T_a=25^\circ C$	1.3	
T_J	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150	$^\circ C$



DIM	mm	
	MIN	MAX
A	10.70	10.95
B	7.70	7.90
C	2.60	2.80
D	0.66	0.66
F	3.40	3.30
G	4.48	4.68
H	2.00	2.20
J	1.35	1.55
K	15.30	15.30
O	3.70	3.90
P	0.40	0.60
V	1.17	1.37



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ELECTRICAL CHARACTERISTICS

$T_C=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -1.5\text{A}; I_B = -0.15\text{A}$			-0.3	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = -1.5\text{A}; I_B = -0.15\text{A}$			-1.2	V
I_{CBO}	Collector Cutoff Current	$V_{CE} = -60\text{V}; I_E = 0$			-10	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -7\text{V}; I_C = 0$			-10	μA
h_{FE-1}	DC Current Gain	$I_C = -0.2\text{A}; V_{CE} = -2\text{V}$	60			
h_{FE-2}	DC Current Gain	$I_C = -0.6\text{A}; V_{CE} = -2\text{V}$	100		400	
h_{FE-3}	DC Current Gain	$I_C = -2.0\text{A}; V_{CE} = -2\text{V}$	50			

Switching Times

t_{on}	Turn-On Time	$I_C = -1.0\text{A}; I_{B1} = -I_{B2} = -0.1\text{A}; R_L = 10\Omega; V_{CC} \approx -10\text{V}$			0.5	μs
t_{stg}	Storage Time				2.0	μs
t_f	Fall Time				0.5	μs

◆ h_{FE-2} Classifications

M	L	K
100-200	160-320	200-400