New Jersey Semi-Conductor Products, Inc.

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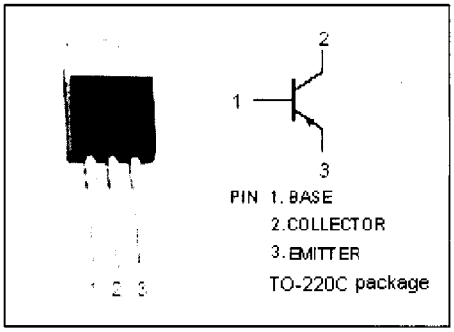
Silicon PNP Power Transistor

2SA1289



DESCRIPTION

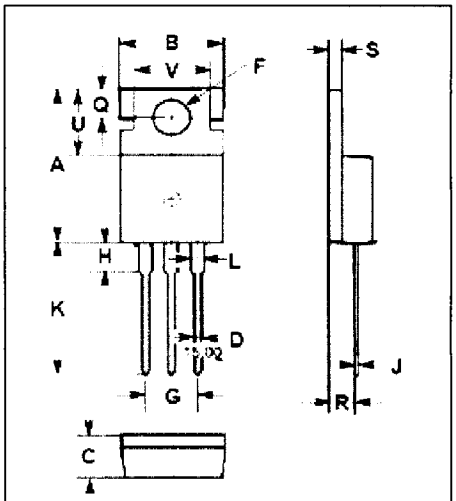
- Low Collector Saturation Voltage-
  : $V_{CE(sat)}$= -0.4V(Max.)@I_C= -2.5A
- Fast Switching Speed
- Complement to Type 2SC3253

APPLICATIONS

- Various inductance lamp drivers for electrical equipment.
- Inverters, converters(strobo, flash, fluorescent lamp lighting circuits).
- Power amplifier (high power car stereo, motor controller).
- High-speed switching (switching regulator, driver).

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-80	V
V_{CEO}	Collector-Emitter Voltage	-60	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-5	A
I_{CM}	Collector Current-Peak	-7	A
P_C	Collector Power Dissipation @ T_C=25℃	30	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	mm MAX
A	15.50	15.90
B	9.90	10.20
C	4.20	4.50
D	0.70	0.90
F	3.40	3.70
G	4.98	5.18
H	2.68	2.90
J	0.44	0.60
K	13.00	13.40
L	1.20	1.45
Q	2.70	2.90
R	2.30	2.70
S	1.29	1.35
U	6.45	6.65
V	8.66	8.86

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= -10mA; R_{BE}= ∞	-60			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C= -1mA; I_E= 0	-80			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= -1mA; I_C= 0	-5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= -2.5A; I_B= -0.125A			-0.4	V
I_{CBO}	Collector Cutoff Current	V_{CB}= -40V; I_E= 0			-100	μ A
I_{EBO}	Emitter Cutoff Current	V_{EB}= -4V; I_C= 0			-100	μ A
h_{FE}	DC Current Gain	I_C= -1A; V_{CE}= -2V	70		280	
f_T	Current-Gain—Bandwidth Product	I_C= -1A; V_{CE}= -5V		100		MHz

◆ **h_{FE} Classifications**

Q	R	S
70-140	100-200	140-280