New Jersey Semi-Conductor Products, Inc.

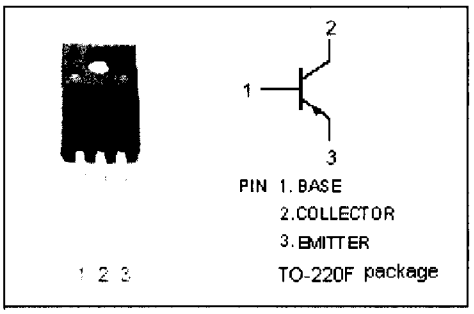
20 STERN AVE.
SPRINGFIELD, NEW JERSEY 07081
U.S.A.

TELEPHONE: (973) 376-2922
(212) 227-6005
FAX: (973) 376-8960

Silicon PNP Power Transistor — 2SA1667

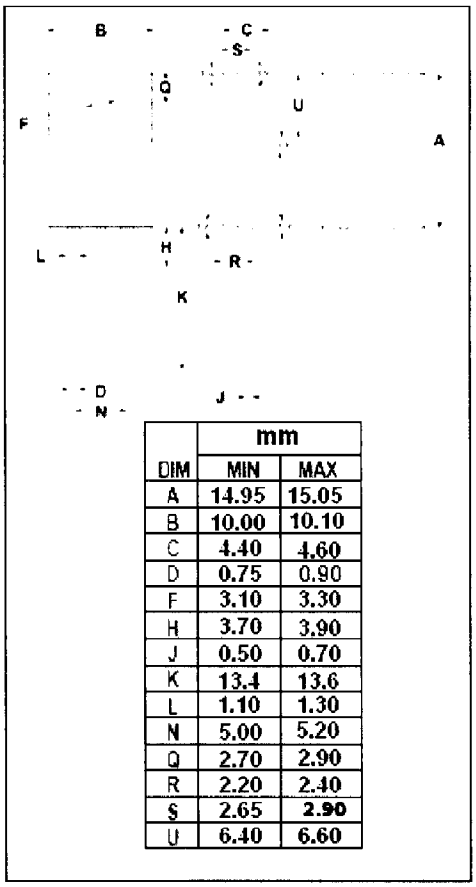
DESCRIPTION

- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= -150V(Min)
- DC Current Gain-
  : h_{FE}= 60(Min)@ (V_{CE}= -10V, I_C= -0.7A)
- Complement to Type 2SC4381



APPLICATIONS

- Designed for TV vertical output ,audio output driver and general purpose applications.



DIM	mm MIN	mm MAX
A	14.95	15.05
B	10.00	10.10
C	4.40	4.60
D	0.75	0.90
F	3.10	3.30
H	3.70	3.90
J	0.50	0.70
K	13.4	13.6
L	1.10	1.30
N	5.00	5.20
Q	2.70	2.90
R	2.20	2.40
S	2.65	2.90
U	6.40	6.60

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-150	V
V_{CEO}	Collector-Emitter Voltage	-150	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current-Continuous	-2	A
I_B	Base Current-Continuous	-1	A
P_C	Collector Power Dissipation @T_C=25℃	25	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~150	℃

ELECTRICAL CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= -25mA ; I_B= 0	-150			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= -0.7A; I_B= -0.07A			-1.0	V
I_{CBO}	Collector Cutoff Current	V_{CB}= -150V ; I_E=0			-10	μ A
I_{EBO}	Emitter Cutoff Current	V_{EB}= -6V; I_C=0			-10	μ A
h_{FE}	DC Current Gain	I_C= -0.7A ; V_{CE}= -10V	60			
C_{OB}	Output Capacitance	I_E= 0; V_{CB}= -10V; f= 1MHz		60		pF
f_T	Current-Gain—Bandwidth Product	I_E= 0.2A ; V_{CE}= -12V		20		MHz

Switching Times

t_{on}	Turn-On Time	I_C= -1A; I_{B1}= -I_{B2}= -0.1A; V_{CC}= -20V; R_L= 20Ω		0.4		μ s
t_{stg}	Storage Time			1.5		μ s
t_f	Fall Time			0.5		μ s