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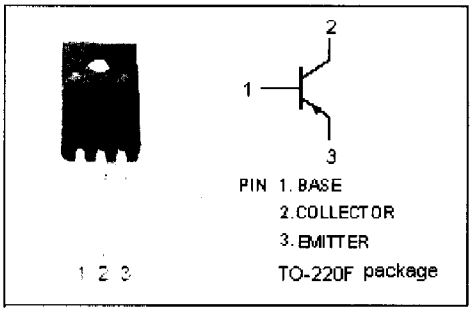
Silicon PNP Power Transistor — 2SA1640

DESCRIPTION

- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= -30V(Min)
- Low Collector Saturation Voltage-
  : $V_{CE(sat)}$= −0.4V(Max)@ (I_C= -3A, I_B= -0.1A)

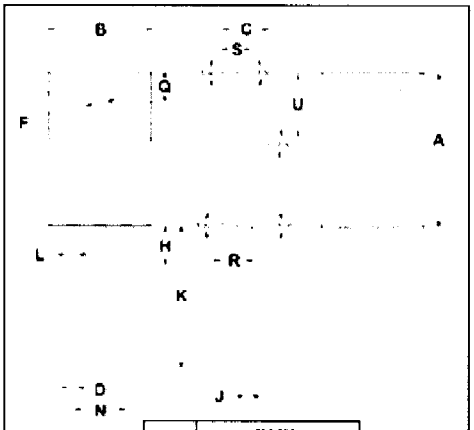


APPLICATIONS

- Designed for switching regulator, driver and power switching applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-30	V
V_{CEO}	Collector-Emitter Voltage	-30	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-7	A
I_B	Base Current-Continuous	-1	A
P_C	Collector Power Dissipation @T_C=25℃	40	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~150	℃



DIM	mm MIN	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

ELECTRICAL CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= -10mA; I_B= 0	-30			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= -1mA; I_C= 0	-5			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C= -1mA; I_E= 0	-30			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= -3A; I_B= -0.1A			-0.4	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= -3A; I_B= -0.1A			-1.0	V
I_{CBO}	Collector Cutoff Current	V_{CB}= -30V; I_E= 0			-10	μ A
I_{EBO}	Emitter Cutoff Current	V_{EB}= -5V; I_C= 0			-10	μ A
h_{FE}	DC Current Gain	I_C= -0.2A; V_{CE}= -2V	100			
f_T	Current-Gain—Bandwidth Product	I_C= -0.5A; V_{CE}= -10V	20			MHz