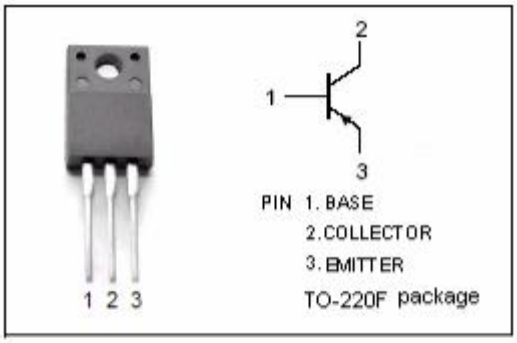
SPTECH Silicon PNP Power Transistor

DESCRIPTION

- Large current capacitance
- High-speed switching
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

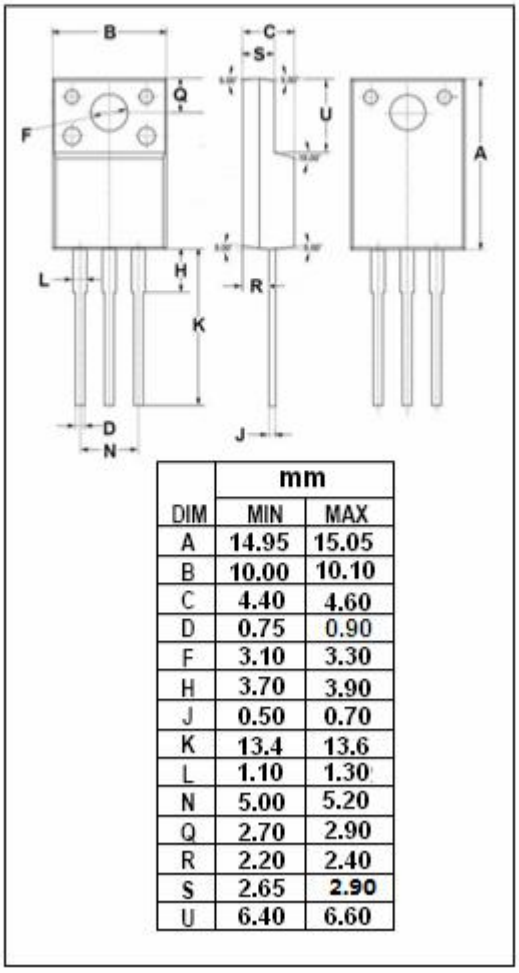


APPLICATIONS

- relay drivers,lamp drivers,motor drivers

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-50	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current-Continuous	-10	A
I_{CM}	Collector Current-Peak	-13	A
P_C	Collector Power Dissipation @ T_C=25℃	25	W
	Collector Power Dissipation @T_a=25℃	2	
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-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

SPTECH Silicon PNP Power Transistor

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= -6A; I_B= -300mA			-0.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= -6A; I_B= -300mA			-1.2	V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= -1mA; I_B= 0	-50			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= -100uA; I_C= 0	-6			V
I_{CBO}	Collector Cutoff Current	V_{CB}= -40V; I_E= 0			-10	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= -4V; I_C= 0			-10	μA
h_{FE}	DC Current Gain	I_C= -0.27A; V_{CE}= -2V	150		450	
C_{OB}	Output Capacitance	I_E= 0; V_{CB}= -10V; f= 1.0MHz		115		pF
f_T	Current-Gain—Bandwidth Product	I_C= -1A; V_{CE}= -10V		230		MHz