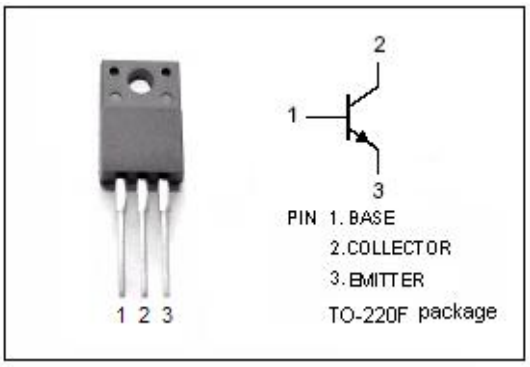
SPTECH Silicon NPN Power Transistor



DESCRIPTION

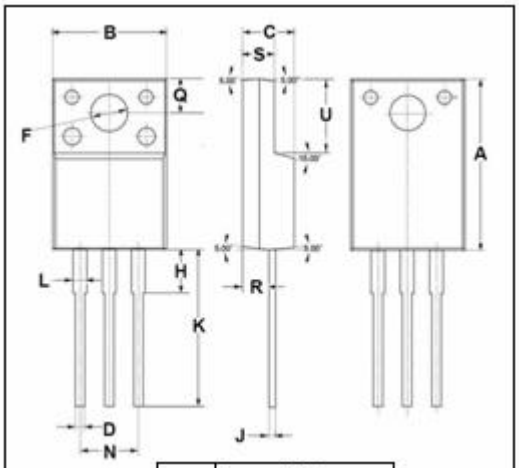
- Low Collector Saturation Voltage
  : $V_{CE(sat)}$= 0.35V(Max)@ I_C=6A
- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= 50V (Min)
- Complement to Type 2SA1567

APPLICATIONS

- Designed for use in DC motor driver and general purpose applications

ABSOLUTE MAXIMUM RATINGS(Ta=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	12	A
I_B	Base Current-Continuous	3	A
P_C	Collector Power Dissipation @ T_C=25℃	35	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



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

SPTECH Silicon NPN Power Transistors

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 25mA ; I_B= 0	50			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 6A; I_B= 0.3A			0.35	V
I_{CBO}	Collector Cutoff Current	V_{CB}=50V; I_E= 0			100	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 6V; I_C= 0			10	μA
h_{FE}	DC Current Gain	I_C= 6A ; V_{CE}= 1V	50			
f_T	Current-Gain—Bandwidth Product	I_E= -0.5A ; V_{CE}= 12V		40		MHz
C_{OB}	Output Capacitance	I_E= 0 ; V_{CB}= 12V;f_{test}= 1.0MHz		180		pF
Switching times						
t_{on}	Turn-on Time	I_C= 6A ; I_{B1}= -I_{B2}= 0.12A R_L= 4Ω ;V_{CC}= 24V		0.6		μs
t_{stg}	Storage Time			1.4		μs
t_f	Fall Time			0.4		μs