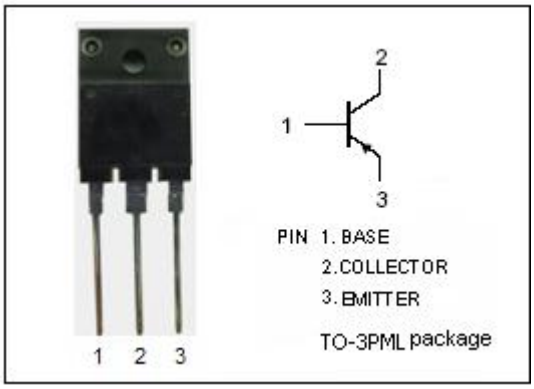
SPTECH Silicon PNP Power Transistor 2SA1746



DESCRIPTION

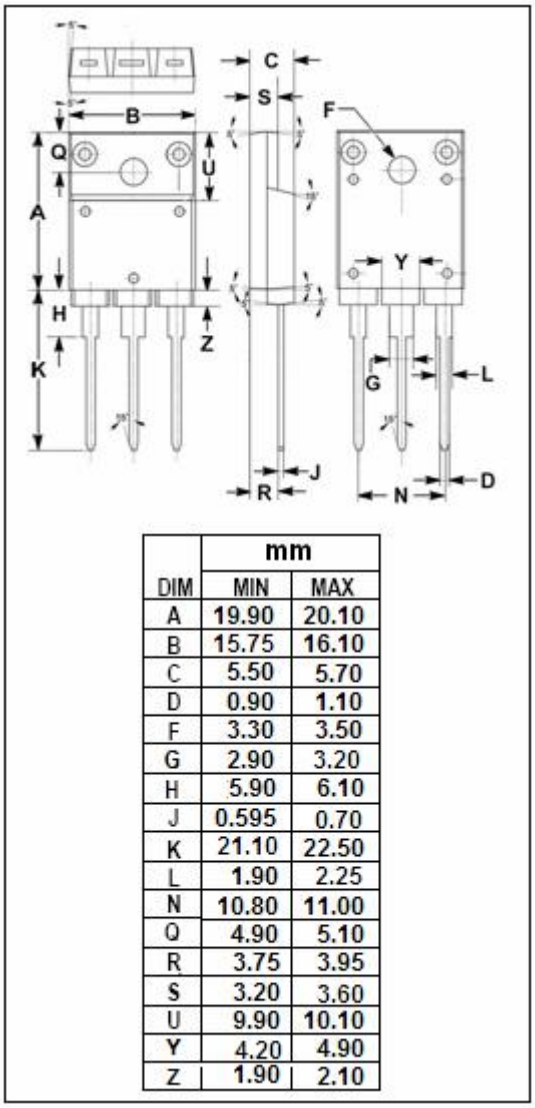
- Low Collector Saturation Voltage
  :$V_{CE(sat)}$= -0.5(V)(Max)@I_C= -5A
- Good Linearity of h_{FE}

APPLICATIONS

- Designed for chopper regulator, switch and general purpose applications

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-70	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current-Continuous	-12	A
I_{CM}	Collector Current-Peak	-20	A
I_B	Base Current-Continuous	-4	A
P_C	Collector Power Dissipation @ T_C=25℃	60	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	MAX
A	19.90	20.10
B	15.75	16.10
C	5.50	5.70
D	0.90	1.10
F	3.30	3.50
G	2.90	3.20
H	5.90	6.10
J	0.595	0.70
K	21.10	22.50
L	1.90	2.25
N	10.80	11.00
Q	4.90	5.10
R	3.75	3.95
S	3.20	3.60
U	9.90	10.10
Y	4.20	4.90
Z	1.90	2.10

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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= -5A; I_B= -80mA			-0.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= -5A; I_B= -80mA			-1.2	V
I_{CBO}	Collector Cutoff Current	V_{CB}= -70V ; I_E= 0			-10	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= -6V; I_C= 0			-10	μA
h_{FE}	DC Current Gain	I_C= -5A ; V_{CE}= -1V	50			
C_{OB}	Output Capacitance	I_E= 0 ; V_{CB}= -10V;f= 1.0MHz		400		pF
f_T	Current-Gain—Bandwidth Product	I_E= 1A ; V_{CE}= -12V		25		MHz

Switching Times

t_{on}	Turn-on Time	I_C= -5A , R_L= 4Ω , I_{B1}= -I_{B2}= -80mA,V_{CC}= −20V		0.5		μs
t_{stg}	Storage Time			0.6		μs
t_f	Fall Time			0.3		μs