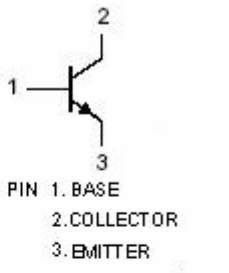
SPTECH Silicon NPN Power Transistor 2N6486

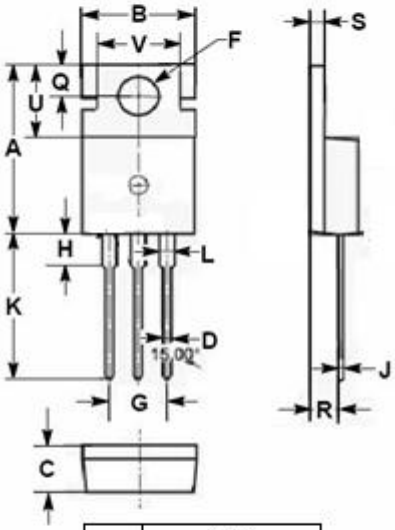
DESCRIPTION

- DC Current Gain Specified to 15 Amperes-
  : h_{FE} =20-150@ I_C= 5.0A
  =5.0(Min)@ I_C=15A
- Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$= 40V(Min)
- Complement to Type 2N6489



APPLICATIONS

- Designed for use in general-purpose amplifier and switching applications



DIM	mm MIN	MAX
A	15.50	15.90
B	9.90	10.20
C	4.20	4.50
D	0.70	0.90
F	3.40	3.70
G	4.98	5.18
H	2.68	2.90
J	0.44	0.60
K	13.00	13.40
L	1.20	1.45
Q	2.70	2.90
R	2.30	2.70
S	1.29	1.35
U	6.45	6.65
V	8.66	8.86

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	50	V
V_{CEO}	Collector-Emitter Voltage	40	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	15	A
I_B	Base Current	5	A
P_C	Collector Power Dissipation @ T_C=25℃	57	W
	Collector Power Dissipation @ T_a=25℃	1.8	
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-65~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance, Junction to Case	1.67	℃/W

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= 50mA; I_B= 0	40		V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	I_C=5A; I_B=0.5A		1.3	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	I_C=15A; I_B=5.0A		3.5	V
$V_{BE(on)-1}$	Base-Emitter On Voltage	I_C=5A; V_{CE}=4V		1.3	V
$V_{BE(on)-2}$	Base-Emitter On Voltage	I_C=15A; V_{CE}=4V		3.5	V
I_{CEO}	Collector Cutoff Current	V_{CE}= 20V; I_B= 0		1.0	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}=5V; I_C=0		1.0	mA
h_{FE-1}	DC Current Gain	I_C=5A ; V_{CE}=4V	20	150	
h_{FE-2}	DC Current Gain	I_C=15A ; V_{CE}=4V	5		
f_T	Current-Gain—Bandwidth Product	I_C=1.0A ; V_{CE}=4V,f_{test}=1.0MHz	5.0		MHz