

SPTECH Silicon NPN Power Transistor**2KW8629****DESCRIPTION**

- High Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 500V$ (Min)
- High Switching Speed

APPLICATIONS

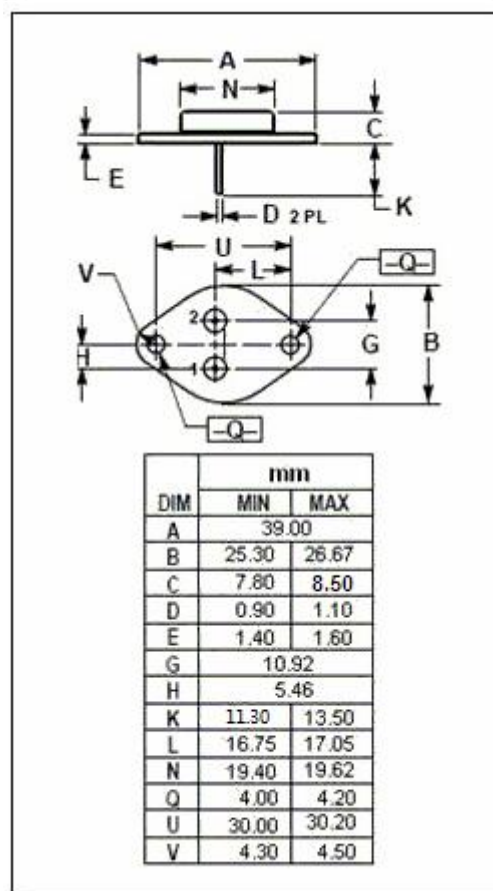
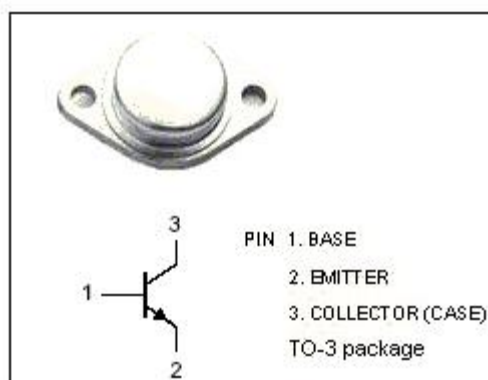
- Power switching
- Power amplification
- Power driver

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ C$)

SYMBOL	PARAMETER	MAX	UNIT
V_{CBO}	Collector-Base Voltage	900	V
V_{CEO}	Collector-Emitter Voltage	500	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	20	A
I_{CM}	Collector Current-Peak	40	A
I_B	Base Current-Continuous	6	A
P_C	Collector Power Dissipation @ $T_C=25^\circ C$	150	W
T_j	Junction Temperature	200	$^\circ C$
T_{stg}	Storage Temperature Range	-65~200	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	1.0	$^\circ C/W$



SPTECH Silicon NPN Power Transistor**2KW8629****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 50mA; L= 25mH	500			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 6A; I _B = 1.2A			1.2	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 6A; I _B = 1.2A			1.5	V
h _{FE}	DC Current Gain	I _C = 5A; V _{CE} = 2V	12		60	
h _{FE}	DC Current Gain	I _C = 10A; V _{CE} = 2V	6		30	
I _{CBO}	Collector Cutoff Current	V _{CB} = 500V; I _E = 0 T _C =125°C			1.0 4.0	mA
I _{CEO}	Collector Cutoff Current	V _{CE} = 500V; I _B = 0			5.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			1.0	mA

Switching Times

t _r	Rise Time	I _C = 6A; I _{B1} =- I _{B2} = 1.2A			1.0	μ s
t _{stg}	Storage Time				2.0	μ s
t _f	Fall Time				1.0	μ s