

DESCRIPTION

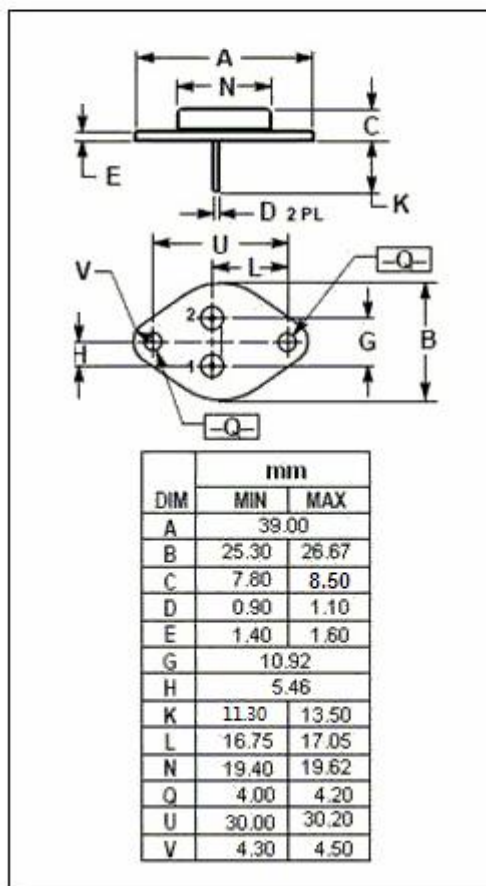
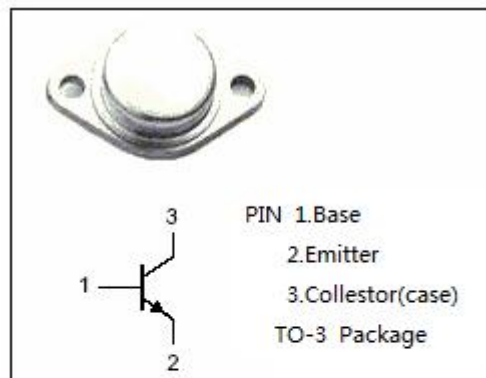
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 80V$ (Min)
- High Power Dissipation
- High Current Capability

APPLICATIONS

- High power amplifier applications.
- High Power switching applications.
- DC-DC converter applications.
- Regulator applications.

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

SYMBOL	PARAMETER	MAX	UNIT
V_{CBO}	Collector-Base Voltage	100	V
V_{CEO}	Collector-Emitter Voltage	80	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	30	A
I_B	Base Current-Continuous	8	A
P_C	Collector Power Dissipation @ $T_C=25^\circ C$	200	W
T_j	Junction Temperature	175	$^\circ C$
T_{stg}	Storage Temperature Range	-65~175	$^\circ C$



SPTECH Silicon NPN Power Transistor**2SD797****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 10mA; I _B = 0	80			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 15A; I _B = 3A		0.6	1.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 15A; I _B = 3A		1.4	2.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 100V; I _E = 0			0.1	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 7V; I _C = 0			0.1	mA
h _{FE-1}	DC Current Gain	I _C = 1A; V _{CE} = 5V	60		200	
h _{FE-2}	DC Current Gain	I _C = 15A; V _{CE} = 5V	10			
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = 10V; f _{test} = 1.0MHz		400		pF
f _T	Current-Gain—Bandwidth Product	I _C = 1A; V _{CE} = 5V		1.5		MHz

Switching Times

t _{on}	Turn-on Time	V _{CC} = 50V, R _L = 10 Ω, I _{B1} = I _{B2} = 0.5A		2.5		
t _{stg}	Storage Time			6.0		
t _f	Fall Time			1.5		