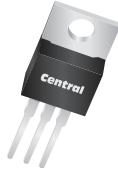


2N6497
2N6498
2N6499

**SILICON
NPN POWER TRANSISTORS**



TO-220 CASE



www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR 2N6497, 2N6498, and 2N6499 are silicon NPN power transistors designed for high voltage amplifier applications.

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: ($T_C=25^\circ\text{C}$)

Collector-Base Voltage
Collector-Emitter Voltage
Emitter-Base Voltage
Continuous Collector Current
Peak Collector Current
Continuous Base Current
Power Dissipation
Operating and Storage Junction Temperature
Thermal Resistance

SYMBOL	2N6497	2N6498	2N6499	UNITS
V_{CBO}	350	400	450	V
V_{CEO}	250	300	350	V
V_{EBO}		6.0		V
I_C		5.0		A
I_{CM}		10		A
I_B		2.0		A
P_D		80		W
T_J, T_{stg}		-65 to +150		$^\circ\text{C}$
θ_{JC}		1.56		$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS: ($T_C=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	2N6497		2N6498		2N6499		UNITS
		MIN	MAX	MIN	MAX	MIN	MAX	
I_{CEX}	$V_{CE}=\text{Rated } V_{CBO}, V_{BE}=1.5\text{V}$	-	1.0	-	1.0	-	1.0	mA
I_{CEX}	$V_{CE}=\frac{1}{2}\text{Rated } V_{CBO},$ $V_{BE}=1.5\text{V}, T_C=100^\circ\text{C}$	-	10	-	10	-	10	mA
I_{EBO}	$V_{EB}=6.0\text{V}$	-	1.0	-	1.0	-	1.0	mA
BV_{CEO}	$I_C=25\text{mA}$	250	-	300	-	350	-	V
$V_{CE(SAT)}$	$I_C=2.5\text{A}, I_B=500\text{mA}$	-	1.0	-	1.25	-	1.5	V
$V_{CE(SAT)}$	$I_C=5.0\text{A}, I_B=2.0\text{A}$	-	5.0	-	5.0	-	5.0	V
$V_{BE(SAT)}$	$I_C=2.5\text{A}, I_B=500\text{mA}$	-	1.5	-	1.5	-	1.5	V
$V_{BE(SAT)}$	$I_C=5.0\text{A}, I_B=2.0\text{A}$	-	2.5	-	2.5	-	2.5	V
h_{FE}	$V_{CE}=10\text{V}, I_C=2.5\text{A}$	10	75	10	75	10	75	
h_{FE}	$V_{CE}=10\text{V}, I_C=5.0\text{A}$	3.0	-	3.0	-	3.0	-	
f_T	$V_{CE}=10\text{V}, I_C=250\text{mA}, f=1.0\text{MHz}$	5.0	-	5.0	-	5.0	-	MHz
C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=100\text{kHz}$	-	150	-	150	-	150	pF
t_r	$V_{CC}=125\text{V}, I_C=2.5\text{A}, I_{B1}=0.5\text{A}$	-	1.0	-	1.0	-	1.0	μs
t_s	$V_{CC}=125\text{V}, I_C=2.5\text{A}, V_{BE}=5.0\text{V},$ $I_{B1}=I_{B2}=0.5\text{A}$	-	2.5	-	2.5	-	2.5	μs
t_f	$V_{CC}=125\text{V}, I_C=2.5\text{A}, I_{B1}=I_{B2}=0.5\text{A}$	-	1.0	-	1.0	-	1.0	μs

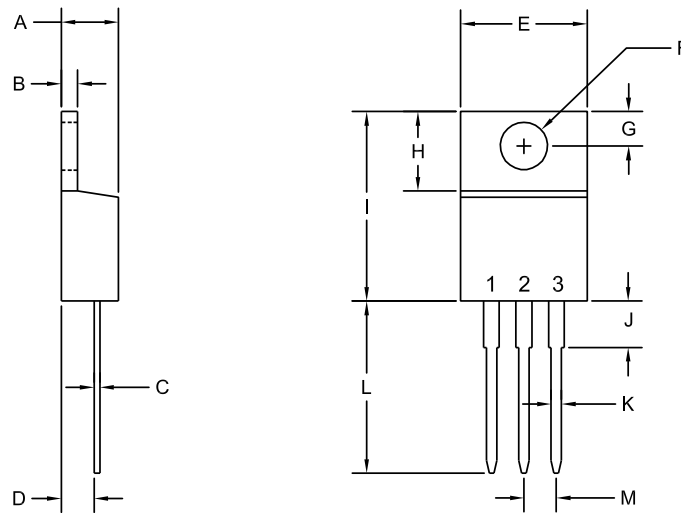
R1 (31-July 2013)

2N6497
2N6498
2N6499

SILICON
NPN POWER TRANSISTORS



TO-220 CASE - MECHANICAL OUTLINE



R2

LEAD CODE:

- 1) Base
- 2) Collector
- 3) Emitter
- Tab) Collector

MARKING:

FULL PART NUMBER

SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.170	0.190	4.31	4.82
B	0.045	0.055	1.15	1.39
C	0.013	0.026	0.33	0.65
D	0.083	0.107	2.10	2.72
E	0.394	0.417	10.01	10.60
F (DIA)	0.140	0.157	3.55	4.00
G	0.100	0.118	2.54	3.00
H	0.230	0.270	5.85	6.85
I	0.560	0.625	14.23	15.87
J	-	0.250	-	6.35
K	0.025	0.038	0.64	0.96
L	0.500	0.579	12.70	14.70
M	0.090	0.110	2.29	2.79

TO-220 (REV: R2)

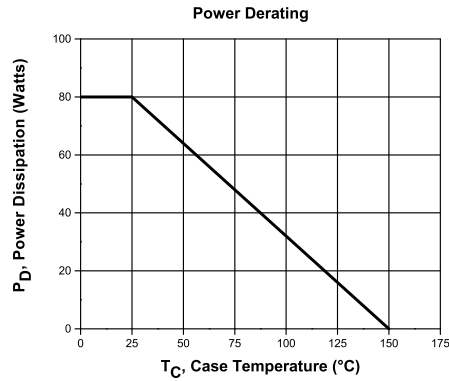
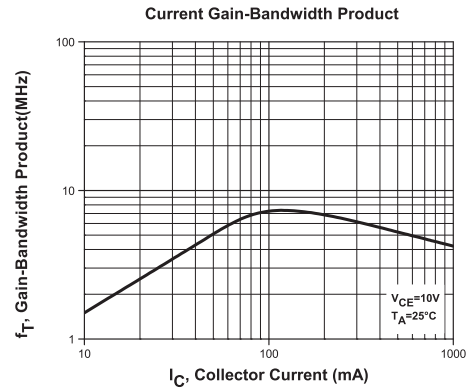
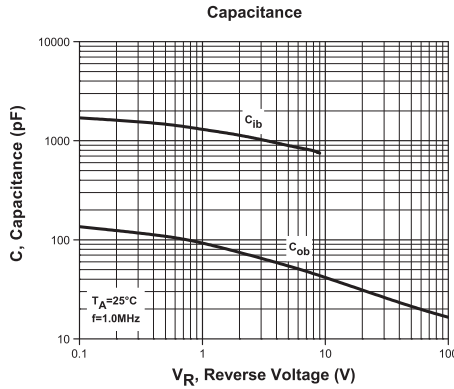
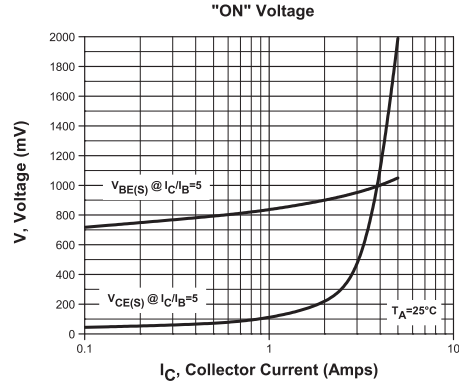
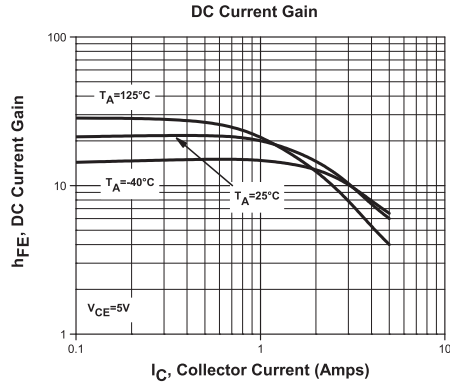
R1 (31-July 2013)

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NPN POWER TRANSISTORS



TYPICAL ELECTRICAL CHARACTERISTICS



R1 (31-July 2013)