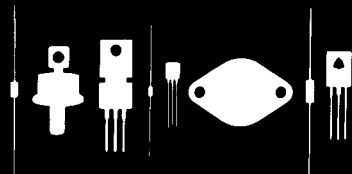


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145 Adams Avenue
Hauppauge, New York 11788



2N3442

Single Diffused (Hometaxial)
NPN Silicon Power Transistor

JEDEC TO 3 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N3442 is a Silicon NPN Single Diffused (Hometaxial) High Voltage Power Transistor designed for high voltage, high power amplifier applications.

MAXIMUM RATINGS (T_C=25°C)

	SYMBOL		UNIT
Collector-Base Voltage	V _{CB0}	160	V
Collector-Emitter Voltage	V _{CEV}	160	V
Collector-Emitter Voltage	V _{CEO}	140	V
Emitter-Base Voltage	V _{EBO}	7.0	V
Collector Current	I _C	10	A
Collector Current (PEAK)	I _{CM}	15	A
Base Current	I _B	7.0	A
Power Dissipation	P _D	117	W
Operating and Storage			
Junction Temperature	T _J , T _{stg}	-65 TO +200	°C
Thermal Resistance	θ _{JC}	1.5	°C/W

ELECTRICAL CHARACTERISTICS (T_C=25°C)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
I _{CEV}	V _{CE} =140V, V _{BE} =1.5V		5.0	mA
I _{CEO}	V _{CE} =140V		200	mA
I _{EBO}	V _{BE} =7.0V		5.0	mA
BV _{CEO}	I _C =0.2A	140		V
V _{CE(SAT)}	I _C =10A, I _B =2.0A		5.0	V
V _{BE(ON)}	V _{CE} =4.0V, I _C =10A		5.7	V
h _{FE}	V _{CE} =4.0V, I _C =3.0A	20	70	
h _{FE}	V _{CE} =4.0V, I _C =10A	7.5		
h _{fe}	V _{CE} =4.0V, I _C =2.0A, f=1.0kHz	12	72	
f _T	V _{CE} =4.0V, I _C =2.0A, f=40kHz	80		kHz

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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