



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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CentralTM Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

BU406

BU407

BU408

NPN SILICON POWER TRANSISTOR

JEDEC TO-220 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR BU406 Series types are Silicon NPN High Voltage Power Transistors designed for fast switching, horizontal deflection output stages of monitors.

MAXIMUM RATINGS ($T_C=25^\circ\text{C}$ unless otherwise noted)

	SYMBOL	BU406	BU407	BU408	UNIT
Collector Base Voltage	V_{CBO}	400	330	400	V
Collector Emitter Voltage	V_{CES}	400	330	400	V
Collector Emitter Voltage	V_{CEO}	200	150	200	V
Emitter Base Voltage	V_{EBO}		6.0		V
Collector Current	I_C		7.0		A
Collector Current (PEAK)	I_{CM}		15		A
Base Current	I_B		4.0		A
Power Dissipation	P_D		60		W
Operating and Storage Junction Temperature	T_J, T_{STG}		-65 TO +150		$^\circ\text{C}$
Thermal Resistance	θ_{JC}		2.08		$^\circ\text{C/W}$
Thermal Resistance	θ_{JA}		70		$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	BU406		BU407		BU408		UNIT
		MIN	MAX	MIN	MAX	MIN	MAX	
I_{CES}	$V_{CE}=\text{Rated } V_{CES}$		5.0		5.0		5.0	mA
I_{CES}	$V_{CE}=250\text{V (406, 408), } V_{CE}=200\text{V (407)}$		0.1		0.1		0.1	mA
I_{CES}	$V_{CE}=250\text{V (406, 408), } V_{CE}=200\text{V (407), } T_C=150^\circ\text{C}$		1.0		1.0		1.0	mA
I_{EBO}	$V_{EB}=6.0\text{V}$		1.0		1.0		1.0	mA
$V_{CE(S)}$	$I_C=5.0\text{A, } I_B=0.5\text{A}$		1.0		1.0		-	V
$V_{CE(S)}$	$I_C=6.0\text{A, } I_B=1.2\text{A}$		-		-		1.0	V
$V_{BE(S)}$	$I_C=5.0\text{A, } I_B=0.5\text{A}$		1.2		1.2		-	V
$V_{BE(S)}$	$I_C=6.0\text{A, } I_B=1.2\text{A}$		-		-		1.5	V
f_T	$V_{CE}=10\text{V, } I_C=0.5\text{A, } f=1.0\text{MHz}$		10		10		10	MHz
t_f	$V_{CC}=40\text{V, } I_C=5.0\text{A, } I_B=0.5\text{A}$		0.75		0.75		-	μs
t_f	$V_{CC}=40\text{V, } I_C=6.0\text{A, } I_B=1.2\text{A}$		-		-		0.4	μs
C_{ob}	$V_{CB}=10\text{V, } I_E=0, f=1.0\text{MHz}$		80TYP		80TYP		80TYP	pF
I_s/b	$V_{CE}=10\text{V, } t=1.0\text{ sec}$		6.0TYP		6.0TYP		6.0TYP	A

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).

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