

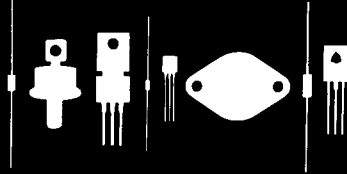
Central
Semiconductor Corp.

Central
Semiconductor Corp.

Central
Semiconductor Corp.

**Central™
Semiconductor Corp.**

145 Adams Avenue
Hauppauge, New York 11788



2N3773

2N6609

COMPLEMENTARY SILICON POWER
TRANSISTORS

16 AMPS

JEDEC TO-3 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N3773, 2N6609, are Complementary Silicon Power Transistors manufactured by the epitaxial base process, mounted in a hermetically sealed metal case, designed for high power amplifier, converter and switching regulator applications.

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

	<u>SYMBOL</u>		<u>UNIT</u>
Collector-Base Voltage	V_{CB0}	160	V
Collector-Emitter Voltage	V_{CE0}	140	V
Collector-Emitter Voltage	V_{CEV}	160	V
Emitter-Base Voltage	V_{EB0}	7.0	V
Collector Current	I_C	16	A
Collector Current (Peak)	I_{CM}	30	A
Base Current	I_B	4.0	A
Base Current (Peak)	I_{BM}	15	A
Power Dissipation	P_D	150	W
Operating and Storage Junction Temperature	T_J, T_{STG}	-65 TO +200	$^\circ\text{C}$
Thermal Resistance	θ_{JC}	1.17	$^\circ\text{C/W}$

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

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>MIN</u>	<u>MAX</u>	<u>UNIT</u>
I_{CB0}	$V_{CB}=140\text{V}$		2.0	mA
I_{CE0}	$V_{CE}=120\text{V}$		10	mA
I_{EB0}	$V_{BE}=7.0\text{V}$		5.0	mA
BV_{CE0}	$I_C=0.2\text{A}$	140		V
BV_{CEV}	$I_C=0.1\text{A}, V_{BE}(\text{OFF})=1.5\text{V}, R_{BE}=100\Omega$	160		V
BV_{CER}	$I_C=0.2\text{A}, R_{BE}=100\Omega$	150		V
$V_{CE}(\text{SAT})$	$I_C=8.0\text{A}, I_B=800\text{mA}$		1.4	V
$V_{CE}(\text{SAT})$	$I_C=16\text{A}, I_B=3.2\text{A}$		4.0	V
$V_{BE}(\text{ON})$	$V_{CE}=4.0\text{V}, I_C=8.0\text{A}$		2.2	V
h_{FE}	$V_{CE}=4.0\text{V}, I_C=8.0\text{A}$	15	60	
h_{FE}	$V_{CE}=4.0\text{V}, I_C=16\text{A}$	5.0		
h_{fe}	$V_{CE}=4.0\text{V}, I_C=1.0\text{A}, f=1.0\text{ kHz}$	40		
f_T	$I_C=1.0\text{A}, f=50\text{kHz}$	4.0		MHz
$I_{S/b}$	$V_{CE}=100\text{V}, t=1.0\text{s}$	1.5		A

**Central™
Semiconductor Corp.**

145 Adams Avenue
Hauppauge, NY 11788 USA
Tel: (631) 435-1110 • Fax: (631) 435-1824
www.centrasemi.com

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

CONTACT US

Corporate Headquarters & Customer Support Team

Central Semiconductor Corp.
145 Adams Avenue
Hauppauge, NY 11788 USA
Main Tel: (631) 435-1110
Main Fax: (631) 435-1824
Support Team Fax: (631) 435-3388
www.centalsemi.com

Worldwide Field Representatives:
www.centalsemi.com/wwreps

Worldwide Distributors:
www.centalsemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: www.centalsemi.com/terms