

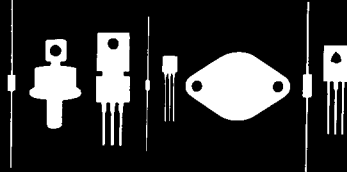
Central  
Semiconductor Corp.

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	$\theta_{JC}$	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](http://www.centrasemi.com)