

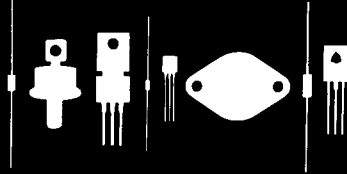
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145 Adams Avenue
Hauppauge, New York 11788



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)

	SYMBOL		UNIT
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)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
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

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