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2N6473 2N6474 NPN
2N6475 2N6476 PNP

COMPLEMENTARY SILICON
SWITCHING TRANSISTORS

TO-220

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

	<u>SYMBOL</u>	<u>2N6473</u> <u>2N6475</u>	<u>2N6474</u> <u>2N6476</u>	<u>UNIT</u>
Collector-Base Voltage	V_{CB0}	110	130	V
Collector-Emitter Voltage ($R_{BE}=100\Omega$)	V_{CE0}	110	130	V
Collector-Emitter Voltage	V_{CEO}	100	120	V
Emitter-Base Voltage	V_{EBO}	5.0		V
Collector Current	I_C	4.0		A
Base Current	I_B	2.0		A
Power Dissipation	P_D	40		W
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 TO +150		$^\circ\text{C}$
Thermal Resistance	θ_{JC}	3.125		$^\circ\text{C}/\text{W}$

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

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>2N6473</u> <u>2N6475</u>	<u>2N6474</u> <u>2N6476</u>	<u>UNIT</u>
		<u>MIN</u>	<u>MAX</u>	
I_{CEV}	$V_{CE}=\text{Rated } V_{CEO}, V_{BE}=1.5\text{V}$		0.1	0.1 mA
I_{CEV}	$V_{CE}=\text{Rated } V_{CEO}, V_{BE}=1.5\text{V}, T_C=100^\circ\text{C}$		2.0	2.0 mA
I_{CER}	$V_{CE}=\text{Rated } V_{CER}, R_{BE}=100\Omega$		0.1	0.1 mA
I_{CER}	$V_{CE}=\text{Rated } V_{CER}, R_{BE}=100\Omega, T_C=100^\circ\text{C}$		2.0	2.0 mA
I_{CEO}	$V_{CE}=\frac{1}{2} \text{ Rated } V_{CEO}$		1.0	1.0 mA
I_{EBO}	$V_{BE}=5.0\text{V}$		1.0	1.0 mA
BV_{CEO}	$I_C=100\text{mA}$	100	120	V
BV_{CER}	$I_C=100\text{mA}, R_{BE}=100\Omega$	110	130	V
$V_{CE(\text{SAT})}$	$I_C=1.5\text{A}, I_B=0.15\text{A}$		1.2	1.2 V
$V_{CE(\text{SAT})}$	$I_C=4.0\text{A}, I_B=2.0\text{A}$		2.5	2.5 V
$V_{BE(\text{ON})}$	$V_{CE}=4.0\text{V}, I_C=1.5\text{A}$		2.0	2.0 V
$V_{BE(\text{ON})}$	$V_{CE}=2.5\text{V}, I_C=4.0\text{A}$		3.5	3.5 V
h_{FE}	$V_{CE}=4.0\text{V}, I_C=1.5\text{A}$	15	150	15 150
h_{FE}	$V_{CE}=2.5\text{V}, I_C=4.0\text{A}$	2.0		2.0
h_{fe}	$V_{CE}=4.0\text{V}, I_C=0.5\text{A}, f=50\text{kHz}$		20	20
f_T	$V_{CE}=4.0\text{V}, I_C=0.5\text{A}$ (2N6473, 2N6474)	4.0	4.0	MHz
f_T	$V_{CE}=4.0\text{V}, I_C=0.5\text{A}$ (2N6475, 2N6476)	5.0	5.0	MHz
C_{ob}	$V_{CB}=10\text{V}, f=1.0\text{MHz}$		250	250 pF

NJ Semi-Conductors reserves the right to change test conditions, parameters limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

Quality Semi-Conductors

