

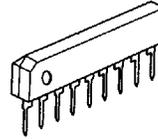
NJD6506/6507

The NJD6506 and NJD6507 each consist of four general purpose silicon NPN transistors on common emitter. The NJD6506 contains resistors for input bias.

■ Absolute Maximum Ratings (Ta=25°C)

Collector to Emitter Voltage	(6506) V_{CE}	20V
	(6507) V_{CEO}	20V
Collector to Base Voltage	(6507) V_{CBO}	25V
Emitter to Base Voltage	(6507) V_{EBO}	5V
Peak-to-Peak Collector	I_{CMAX}	200mA
Power Dissipation	P_D	500mW
Operating Temperature Range	T_{opr}	-20~+75°C
Storage Temperature Range	T_{stg}	-40~+125°C

■ Package Outline

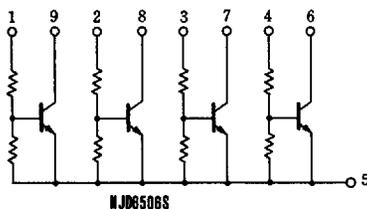


NJD6506S
NJD6507S

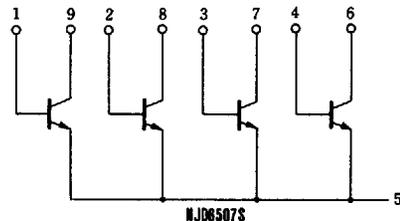
■ Electrical Characteristics (Ta=25°C)

Parameter	Test Condition	Symbol	Min.	Typ.	Max.	Unit
6506						
Leakage Current	$V_0=20V, V_{IN}=0.2V$	I_L	—	—	2.0	μA
Output Voltage	$V^+=10V, V_{IN}=10V, R_L=400\Omega$	V_{CL}	—	—	120	mV
Output Voltage	$V^+=10V, V_{IN}=10V, R_L=10k\Omega$	V_{CL}	—	—	12.0	mV
Output Voltage	$V^+=10V, V_{IN}=0.2V, R_L=400\Omega$	V_{OH}	9.8	—	—	V
6507						
Collector to Emitter Cutoff Current	$V_{CE}=20V$	I_{CEO}	—	—	10	μA
Collector to Base Cutoff Current	$V_{CB}=25V$	I_{CBO}	—	—	1	μA
DC Current Gain	$V_{CE}=6V, I_B=10\mu A$	H_{FE}	60	—	600	
Base to Emitter Saturation Voltage	$I_C=10mA, I_B=1mA$	V_{BESAT}	—	—	0.95	V
Collector to Emitter Saturation Voltage	$I_C=10mA, I_B=1mA$	V_{CESAT}	—	—	0.2	V
Collector to Emitter Saturation Voltage	$I_C=50mA, I_B=5mA$	V_{CESAT}	—	—	0.5	V

■ Equivalent Circuit & Pin Connection



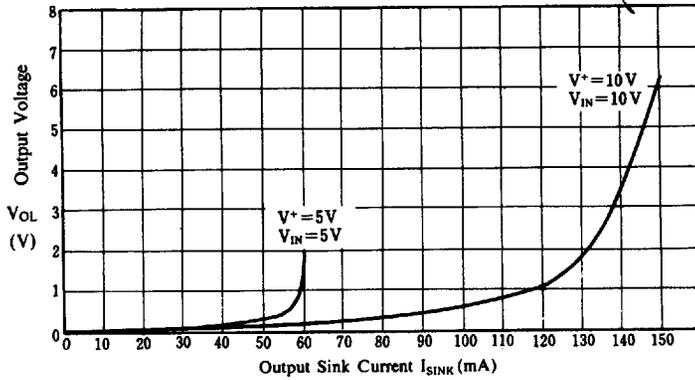
All resistor is 20kΩ type.



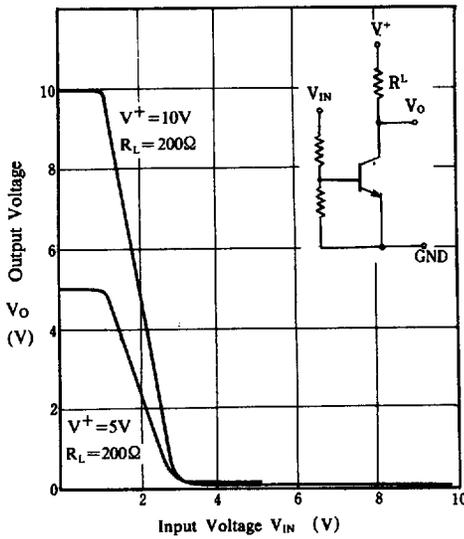
Note: Five transistors in 14-Lead Dual In Line package is available.

■ Typical Characteristics

NJD6506 Output Voltage vs. Output Sink Current
($T_a = 25^\circ\text{C}$)



NJD6506 Input Voltage vs. Output Voltage
($T_a = 25^\circ\text{C}$)



NJD6507 Collector Current vs. Collector to Emitter Voltage
($T_a = 25^\circ\text{C}$)

