

New Jersey Semi-Conductor Products, Inc.

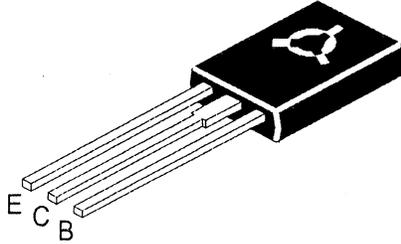
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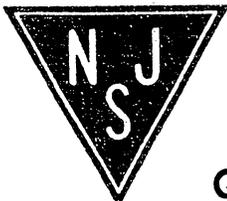
SILICON POWER DARLINGTON TRANSISTORS

(PNP) 2N6034, 2N6035, 2N6036
 (NPN) 2N6037, 2N6038, 2N6039

**TO126
 Plastic Package**



DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
	2N6034, 2N6037	I_{CEX}	$V_{CE}=40V, V_{BE(off)}=1.5V$		100	μA
	2N6035, 2N6038		$V_{CE}=60V, V_{BE(off)}=1.5V$		100	μA
	2N6036, 2N6039		$V_{CE}=80V, V_{BE(off)}=1.5V$		100	μA
			$T_C=125^\circ C$			
	2N6034, 2N6037		$V_{CE}=40V, V_{BE(off)}=1.5V$		500	μA
	2N6035, 2N6038		$V_{CE}=60V, V_{BE(off)}=1.5V$		500	μA
	2N6036, 2N6039		$V_{CE}=80V, V_{BE(off)}=1.5V$		500	μA
Collector cut off Current						
	2N6034, 2N6037	I_{CBO}	$V_{CB}=40, I_E=0$		0.5	mA
	2N6035, 2N6038		$V_{CB}=60, I_E=0$		0.5	mA
	2N6036, 2N6039		$V_{CB}=80, I_E=0$		0.5	mA
Emitter Cut off Current					2.0	mA
		I_{EBO}	$V_{BE}=5V, I_C=0$			
DC Current Gain						
		h_{FE}	$I_C=0.5A, V_{CE}=3V$	500		
			$I_C=2A, V_{CE}=3V$	750	15000	
			$I_C=4A, V_{CE}=3V$	100		
Collector Emitter Saturation Voltage						
		$V_{CE(sat)}$	$I_C=2A, I_B=8mA$		2.0	V
			$I_C=4A, I_B=40mA$		3.0	V
Base Emitter Saturation Voltage					4.0	V
		$V_{BE(sat)}$	$I_C=4A, I_B=40mA$			
Base Emitter on Voltage					2.8	V
		$V_{BE(on)}$	$I_C=2A, I_B=V_{CE}=3V$			
Dynamic Characteristics						
Small Signal Current Gain					25	
		$ h_{fe} $	$I_C=0.75A, V_{CE}=10V$ $f=1MHz$			
Output Capacitance						
		C_{ob}	$V_{CB}=10V, I_E=0,$ $f=0.1MHz$		200	pF
	PNP				100	pF
	NPN					



Quality Semi-Conductors