ECB



SILICON POWER DARLINGTON TRANSISTORS

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

> TO126 Plastic Package

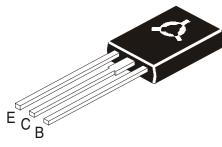
Designed for General -Purpose Amplifier & Low Speed Switching Applications.

DESCRIPTION	SYMBOL	2n6034 2N6035 2N6036	UNIT
		2n6037 2N6038 2N6039	
Collector -Base Voltage	V _{CBO}	40 60 80	V
Collector -Emitter Voltage	V _{CEO}	40 60 80	V
Emitter Base Voltage	V _{EBO}	5.0	V
Collector Current Continuous	I _C	4.0	Α
Collector Current (Peak Value)		8.0	Α
Base Current	I _B	100	mA
Total Power Dissipation @ Tc=25 ^o C	P _D	40	W
Derate above 25°C		0.32	W/ºC
Total Power Dissipation @ Ta=25 ^e C	P _D	1.5	W
Derate above 25°C		0.012	W/ºC
Operating And Storage Junction Temperature Range	T _i , T _{stg}	-65 to +150	°C
THERMAL RESISTANCE			
Junction to ambient	R _{th(j-a)}	83.3	°C/W
Junction to case	R _{th(j-c)}	3.12	ºC/W

ELECTRICAL CHARACTERISTICS (Ta=25°C unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	ΤΥΡ	MAX	UNIT
Collector Emitter (sus) Voltage	V _{CEO(sus)}	I _C =100mA, I _B =0				
2N6034,2N6037			40			V
2N6035, 2N6038			60			V
2N6036, 2N6039			80			V
Collector Cut off Current						
2N6034,2N6037	I _{CEO}	V_{CE} =40V, I_{B} =0			100	μA
2N6035, 2N6038		V_{CE} =60V, I_{B} =0			100	μA
2N6036, 2N6039		V_{CE} =80V, I_{B} =0			100	μA

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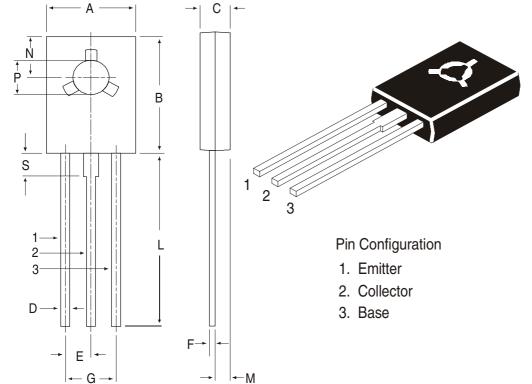
(PNP) 2N6034, 2N6035, 2N6036 (NPN) 2N6037, 2N6038, 2N6039

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DESCRIPTION	SYMBOL	TEST CONDITION	MIN	ТҮР	MAX	UNIT
2N6034,2N6037	-	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
		Tc=125 ⁰ C				
2N6034,2N6037		V_{CE} =40V, V_{BE} (off)=1.5V			500	μA
2N6035, 2N6038	i	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	· 1	V _{CB} =40, I _F =0			0.5	m 1
2N6034,2N6037 2N6035, 2N6038		$V_{CB}=40, I_{E}=0$ $V_{CB}=60, I_{E}=0$			0.5 0.5	mA mA
2N6035, 2N6036 2N6036, 2N6039		V _{CB} =80, I _E =0 V _{CB} =80, I _E =0			0.5	mA
200000, 200000		•CB-00, 1E-0			0.0	1112 \$
Emitter Cut off Current	I _{EBO}	$V_{BE}=5V,I_{C}=0$			2.0	mA
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
	• CE(Sal)	$I_{C}=4A, I_{B}=40mA$			3.0	v
		0 / 5				
Base Emitter Saturation Voltage	V _{BE} (sat)	I _C =4A,I _B =40mA			4.0	V
_						.,
Base Emitter on Voltage	V _{BE} (on)	$I_{C}=2A, I_{B}=V_{CE}=3V$			2.8	V
Dynamic Characteristics						
,						
Small Signal Current Gain	l hfe l	I _C =0.75A,V _{CE} =10V	25			
-		f=1MHz				
Output Capacitance	C _{ob}	VCB=10V, IE=0,				
PNP		f=0.1MHz			200	pF
NPN					100	pF

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TO126 Plastic Package



TO-126 (SOT-32) Plastic Package

DIM	MIN	MAX		
А	7.4	7.8		
В	10.5	10.8		
С	2.4	2.7		
D	0.7	0.9		
E	2.25 TYP.			
F	0.49	0.75		
G	4.5 TYP.			
L	15.7 TYP.			
М	1.27 TYP.			
Ν	3.75 TYP.			
Р	3.0	3.2		
S	2.5 TYP.			

All diminsions in mm.

Packing Detail

PACKAGE	STANDARD PACK		STANDARD PACK INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
TO-126 Bulk	500 pcs/polybag	340 gm/500 pcs	3" x 7.5" x 7.5"	2K	17" x 15" x 13.5"	32K	31 kgs
TO-126 Tube	50 pcs/tube	73 gm/50 pcs	3" x 3.7" x 21.5"	1K	19" x 19" x 19"	10K	15 kgs

TO126 Plastic Package

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