2N6294 2N6295 NPN 2N6296 2N6297 PNP

COMPLEMENTARY SILICON DARLINGTON POWER TRANSISTORS



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DESCRIPTION:

The CENTRAL SEMICONDUCTOR 2N6294, 2N6296 series devices are complementary silicon Darlington power transistors, manufactured by the epitaxial base process, designed for high gain amplifier and medium speed switching applications.

MARKING: FULL PART NUMBER



 V_{CE} =3.0V, I_{C} =1.5A, f=1.0kHz

 V_{CE} =3.0V, I_{C} =1.5A, f=1.0MHz

V_{CB}=10V, I_E=0, f=100kHz (NPN types)

V_{CB}=10V, I_E=0, f=100kHz (PNP types)

 h_{fe}

 f_{T}

 C_{ob}

 C_{ob}

MAXIMIIM R	ATINGS: (T _C =25°C)	SYMBOL	2N6294 2N6296	2N6295 2N6297	UNITS	
Collector-Bas	`	Vсво	60	80	V	
Collector-Em	itter Voltage	VCEO	60	80	V	
Emitter-Base	Voltage	V _{EBO}	5	.0	V	
Continuous (Collector Current	IC	4	.0	Α	
Peak Collect	or Current	I _{CM}	8	.0	Α	
Continuous Base Current		I _B	80		mA	
Power Dissipation		PD	50		W	
Operating an	d Storage Junction Temperature	T _J , T _{stq}	-65 to	+200	°C	
Thermal Res	istance	ΘJC			°C/W	
ELECTRICAL CHARACTERISTICS: (T _C =25°C unless otherwise noted)						
SYMBOL	TEST CONDITIONS	MIN	M	AX	UNITS	
ICEV	V _{CE} =Rated V _{CEO} , V _{EB} =1.5V			.5	mA	
ICEV	V _{CE} =Rated V _{CEO} , V _{EB} =1.5V, T _C	=150°C	5	.0	mA	
I _{CEO}	V _{CE} =½Rated V _{CEO}		0	.5	mA	
I _{EBO}	V _{EB} =5.0V		2	.0	mA	
BVCEO	I _C =50mA, (2N6294, 2N6296)	60			V	
BVCEO	I _C =50mA, (2N6295, 2N6297)	80			V	
V _{CE} (SAT)	I _C =2.0A, I _B =8.0mA		2	.0	V	
VCE(SAT)	I _C =4.0A, I _B =40mA		3	.0	V	
V _{BE(SAT)}	I _C =4.0A, I _B =40mA		4	.0	V	
V _{BE(ON)}	$V_{CE}=3.0V, I_{C}=2.0A$		2	.8	V	
hFE	V _{CE} =3.0V, I _C =2.0A	750	18	3K		
hFE	$V_{CE}=3.0V, I_{C}=4.0A$	100				

300

4.0

120

200

MHz

рF

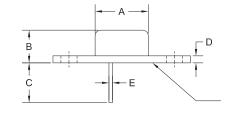
рF

2N6294 2N6295 NPN 2N6296 2N6297 PNP

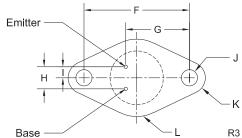
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TO-66 CASE - MECHANICAL OUTLINE



Seating Plane: The seating plane must be within 0.001" concave to 0.004" convex within 0.600" diameter from the center of the device.



MARKING: FULL PART NUMBER

DIMENSIONS								
	INC	HES	MILLIMETERS					
SYMBOL	MIN	MAX	MIN	MAX				
A (DIA)	0.470	0.500	11.94	12.70				
В	0.250	0.340	6.35	8.64				
С	0.360	-	9.14	-				
D	0.050	0.075	1.27	1.91				
E (DIA)	0.028	0.034	0.71	0.86				
F	0.956	0.964	24.28	24.48				
G	0.570	0.590	14.48	14.99				
Н	0.190	0.210	4.83	5.33				
I	0.093	0.107	2.36	2.72				
J (DIA)	0.142	0.152	3.61	3.86				
K (RAD)	0.141		3.58					
L (RAD)	0.345		8.76					

TO-66 (REV:R3)



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REQUESTING PRODUCT PLATING

- 1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
- 2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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