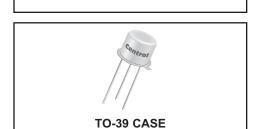
COMPLEMENTARY SILICON POWER TRANSISTORS



MAXIMUM RATINGS: (T_A=25°C unless otherwise noted)



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UNITS

DESCRIPTION:

SYMBOL

The CENTRAL SEMICONDUCTOR 2N5679, 2N5681 series devices are complementary silicon power transistors, manufactured by the epitaxial planar process, designed for general purpose amplifier and switching applications where high voltages are required.

2N5680 2N5682

MARKING: FULL PART NUMBER

2N5679

2N5681

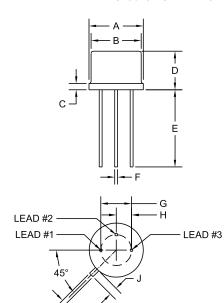
		STWIDGE	<u> 214300 I</u>	<u> 2143002</u>	UNITS			
Collector-Bas	e Voltage	V_{CBO}	100	120	V			
Collector-Emitter Voltage		VCEO	100	120	V			
Emitter-Base	Voltage	V_{EBO}	4	.0	V			
Continuous C	Collector Current	IC	1	.0	Α			
Continuous B	ase Current	I_{B}	0	.5	Α			
Power Dissipation		P_D	1	.0	W			
Power Dissipation (T _C =25°C)		P_{D}	1	0	W			
Operating an	d Storage Junction Temperature	T _J , T _{stg}	-65 to	+200	°C			
Thermal Resi	stance	Θ_{JA}	1	75	°C/W			
Thermal Resistance		Θ JC	17	7.5	°C/W			
ELECTRICAL CHARACTERISTICS: (T _A =25°C unless otherwise noted)								
SYMBOL	TEST CONDITIONS		IIN	MAX	UNITS			
I _{CBO}	V _{CB} =Rated V _{CBO}			1.0	μΑ			
ICEV	V _{CE} =Rated V _{CEO} , V _{EB} =1.5V			1.0	μΑ			
I _{CEV} V _{CE} =Rated V _{CEO} , V _{EB} =1.5V, T		_C =150°C		1.0	mA			
I _{CEO}	V _{CE} =70V (2N5679, 2N5681)			10	μΑ			
I _{CEO}	V _{CE} =80V (2N5680, 2N5682)			10	μΑ			
I _{EBO}	V _{EB} =4.0V			1.0	μΑ			
BV CEO	I _C =10mA (2N5679, 2N5681)	1	00		V			
BV CEO	I _C =10mA (2N5680, 2N5682)	1:	20		V			
VCE(SAT)	I _C =250mA, I _B =25mA			0.6	V			
V _{CE} (SAT)	I _C =500mA, I _B =50mA			1.0	V			
V _{CE} (SAT)	I _C =1.0A, I _B =200mA			2.0	V			
V _{BE(ON)}	V _{CE} =2.0V I _C =250mA			1.0	V			
h _{FE} ` ´	V _{CE} =2.0V, I _C =250mA	4	10	150				
h _{FE}	V _{CE} =2.0V, I _C =1.0A	5	5.0					
h _{fe}	V _{CE} =1.5V, I _C =0.2A, f=1.0kHz	4	10					
f _T	V _{CE} =10V, I _C =100mA, f=10MHz	3	30		MHz			
C _{ob}	V _{CB} =20V, I _E =0, f=1.0MHz			50	pF			

R2 (2-December 2013)

COMPLEMENTARY SILICON POWER TRANSISTORS



TO-39 CASE - MECHANICAL OUTLINE



R1

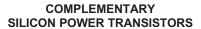
DIMENSIONS								
	INCHES		MILLIMETERS					
SYMBOL	MIN	MAX	MIN	MAX				
A (DIA)	0.335	0.370	8.51	9.40				
B (DIA)	0.315	0.335	8.00	8.51				
С	-	0.040	-	1.02				
D	0.240	0.260	6.10	6.60				
E	0.500	-	12.70	-				
F (DIA)	0.016	0.021	0.41	0.53				
G (DIA)	0.200		5.08					
Н	0.100		2,54					
	0.028	0.034	0.71	0.86				
J	0.029	0.045	0.74	1.14				
TO 20 (DE) (, D4)								

TO-39 (REV: R1)

LEAD CODE:

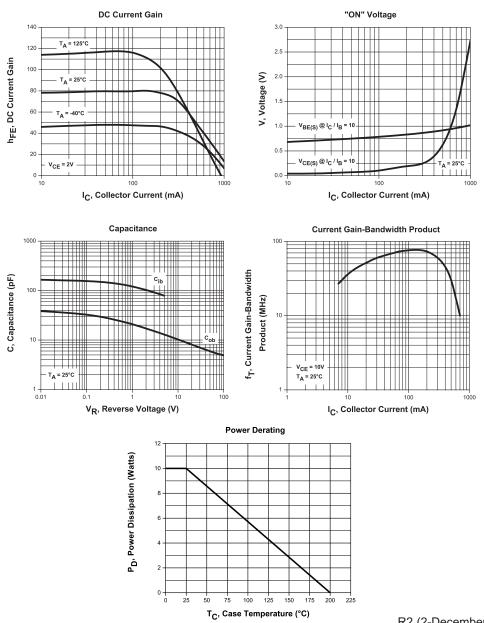
- 1) Emitter
- 2) Base
- 3) Collector

MARKING: FULL PART NUMBER





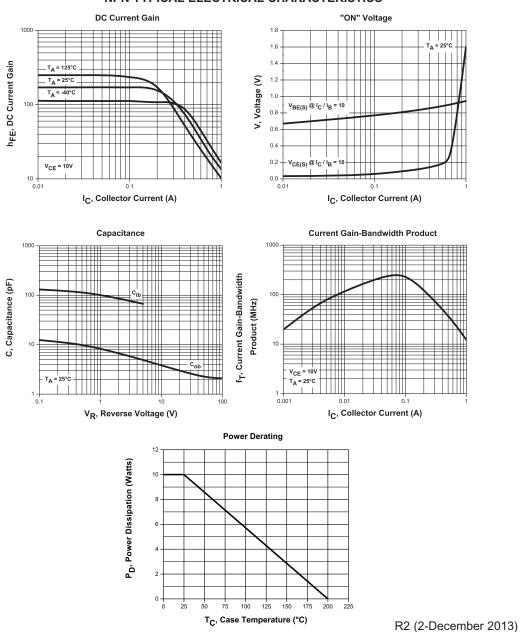
PNP TYPICAL ELECTRICAL CHARACTERISTICS





COMPLEMENTARY SILICON POWER TRANSISTORS

NPN TYPICAL ELECTRICAL CHARACTERISTICS



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