PNP 2N6053

POWER COMPLEMENTARY SILICON TRANSISTORS

The 2N6053 are silicon epitaxial-base transistors in monolithic Darlington configuration mounted in Jedec TO-3 metal case.
They are inteded for use in power linear and low frequency switching applications.
The complementary NPN types are 2N6055.
Compliance to RoHS.

ABSOLUTE MAXIMUM RATINGS

Symbol	Ratings			Value	Unit
V_{CBO}	Collector-Base Voltage	I_E=0	2N6053	-60	V
V_{CEO}	Collector-EmitterVoltage	I_B=0	2N6053	-60	V
V_{EBO}	Emitter-Base Voltage	I_C=0		-5.0	V
I_C	Collector Current			-8	A
I_{CM}	Collector Peak Current			-16	A
I_B	Base Current			-120	mA
P_T	Power Dissipation	@ T_C < 25°		100	W
T_J	Junction			200	°C
T_s	Storage Temperature			-65 to +200	

THERMAL CHARACTERISTICS

Symbol	Ratings	Value	Unit
R_{thJ-C}	Thermal Resistance, Junction to Case	1.17	°C/W

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ELECTRICAL CHARACTERISTICS

TC=25°C unless otherwise noted

Symbol	Ratings	Test Condition(s)		Min	Typ	MAx	Unit
I_{CEX}	Collector Cutoff Current	V_{CE}= V_{CEX} =-60 V, V_{BE}=1.5 V	2N6053	-	-	-500	μA
		V_{CE}= V_{CEX} =-60 V, V_{BE}=1.5 V T_C=150°C	2N6053	-	-	-5	mA
I_{CEO}	Collector Cutoff Current	V_{CE}=-30 Vdc, I_B=0	2N6053	-	-	-0.5	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}=-5 V	2N6053	-	-	-2.0	mA
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage (*)	I_C=-0.1 A	2N6053	-60	-	-	V
$V_{CE(SAT)}$	Collector-Emitter saturation Voltage (*)	I_C=-4 A, I_B=-16 mA	2N6053	-	-	-2.0	V
		I_C=-8 A, I_B=-80 mA	2N6053	-	-	-3.0	
$V_{BE(SAT)}$	Base-Emitter Saturation Voltage (*)	I_C=-8 A, I_B=-80 mA	2N6053	-	-	-4	V
$V_{BE(ON)}$	Base-Emitter Voltage (*)	I_C=-4 A, V_{CE}=-3 V	2N6053	-	-	-2.8	V
f_T	Transition Frequency	I_C=-3 A, V_{CE}=-3 V, f=1 MHz	2N6053	4	-	-	MHz
h_{FE}	DC Current Gain (*)	V_{CE}=-3 V, I_C=-4 A	2N6053	750	-	18000	-
		V_{CE}=-3.0 V, I_C=-8 A	2N6053	100	-	-	

(*) Pulse Width ≈ 300 μs, Duty Cycle ∠ 2.0%

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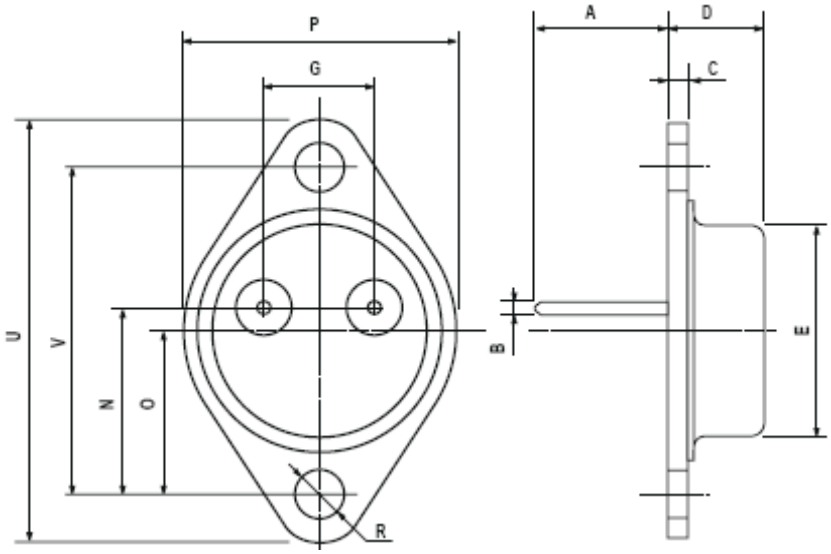
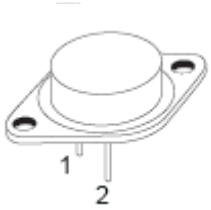
MECHANICAL DATA CASE TO-3

DIMENSIONS (mm)		
	min	max
A	11	13.10
B	0.97	1.15
C	1.5	1.65
D	8.32	8.92
F	19	20
G	10.70	11.1
N	16.50	17.20
P	25	26
R	4	4.09
U	38.50	39.30
V	30	30.30



Pin 1 :	Base
Pin 2 :	Emitter
Case :	Collector



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