D1 1N5401
*Alternative:
MJL3281A + 10Ohm Basiswiderstand
Q1* TIP3055
R1 0R22 3W
Q2* TIP3055
R2 0R22 3W
Q3 BD139G
R3 22R 1W
R4 0R22 5W
V+
J1
Output 25V - 3A
GND
D2 GBU12
CN1 250-204
Main Input 28-30V AC
C1 6800uF
R5 4.7k
Anti-Windup & Clamping
LED1
D10
D5
ZD1 3.3V
C22 47p
R11 150k
C4 4.7n
D3
Konstantstromquelle als Vorlast
D17 1N4148
R7 470
R28 10k
Q11 IRF9530
R7* 1,5k 3W
R6 1.5k
C2 63p
R9 2.2k
C3 100p
D4
U2 TL071CP
R15 6.6k
R17 1.5k
R18 1k
Set I
C5 47u Low ESR
D6
C6 100n
V-
J2
NOT TESTED
SW1
R27 4.7k
C21 220n
R26 47k
D11 BZX55C15
Q6 IRFU9024
Source
Drain
Output ON/OFF alternative
R8 1.5k
R10 10k
U1 TL431
R13 10k
R12 1k
Set Umax
R14 8.2k
R16 4.7k
D7
D8
U3
TL071CP
C7 1n
R19 50k
Set U
R20 1k
12V-0V-12V AC
CN2 250-203
D9 2W10
C9 1000uF
C16 1000uF
U4 LM7812
U6 LM7912
U5 L78L05
C10 470u
C11 0.1u
C12 0.1u
C13 0.1u
C14 1u
C15 10u
C17 470u
C18 0.1u
C19 0.1u
C20 0.1u
Output ON/OFF
J3
R21 820
Q4 BC337-40
R22 1k
R24 10k
C8 100n
Shutdown - Turn off
Q5 BC327-40
R23 1k
R25 4.7k
ZD2 BZX55C8V2 - 8,2V
TITLE: Netzteil TL071
REV: 1.3
Company:
Sheet: 1/1
Date: 2026-08-28
Drawn By: Bastian K.
EasyEDA