Schematic Revision Table	
REV	Notes
B	

60V-1000V

VIN <400V: Pout = 7W
VIN >400V: Pout = 10W

J1 ED120/2DS

J2 ED120/2DS

C7 400V 47uF
C8 400V 47uF
C9 400V 47uF

R2 470k
R5 470k
R8 470k
R11 470k
R12 470k
R13 470k

C31 1.5kV 0.1uF
C32 1.5kV 0.1uF

R6 300k
R7 300k
R9 300k

SZ1SMB5956BT3G 200V D8
SZ1SMB5956BT3G 200V D9
SZ1SMB5956BT3G 200V D3

C34 1kV 0.1uF

D4 SMBJ100A-13-F 100V
D6 BYG23T-M3/TR

T1 750320469

D1 MURA160T3G
D2 MURA160T3G
D5 MURA160T3G

C1 C2 C3 C4 C5 C6 50V 2.2µF
C10 C11 C12 C13 C14 C15 50V 2.2µF
C16 C17 C18 C19 C20 C21 50V 2.2µF

R1 10.0k
R3 10.0k
R4 10.0k

S1 SGND1 33V/10mA-70mA (VIN<400V) 33V/30mA-100mA (VIN>400V)
S2 SGND2 33V/10mA-70mA (VIN<400V) 33V/30mA-100mA (VIN>400V)
S3 SGND3 33V/10mA-70mA (VIN<400V) 33V/30mA-100mA (VIN>400V)

Q3 MMBT3904LT1G
Q5 MMBT2907ALT1G
Q2 STW12N120K5 1200V

*At 1000Vin, voltage stress on Q2 is 1150V, the abs max Vds of Q2 is 1200V

C22 C23 C24 C25 C26 C27 2kV 2200pF

D13 BAV20WS-TP
D14 BAV20WS-TP
D15 DDZ20CQ-7 20V

R26 5.60k
R27 37.4k
R32 13.3k
R29 332k
R28 1.2k
R31 1.50

C28 10µF 50V
C29 10µF 50V

C30 100pF

U1 UCC28730QDRQ1
VDD HV DRV VS CS CBC GND

Aux VIN VDD HV PGND GND

Built on PMP23326

Orderable: PMP23431		Designed for:	Mod. Date: 7/16/2025
TID #: N/A		Project Title: HV PSR Flyback	
Number: PMP23431	Rev: A	Sheet Title:	
SVN Rev: Not in version control		Assembly Variant: 001	Sheet: 3 of 3
Drawn By:		File: PMP23431_Schematic_RevB.SchDoc	Size: B
Engineer: D. Fernandez		Contact: http://www.ti.com/support	

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