

40/60/80 V Automotive-Grade P-Channel MOSFET

AEC-Q101 qualified with 175°C junction temperature

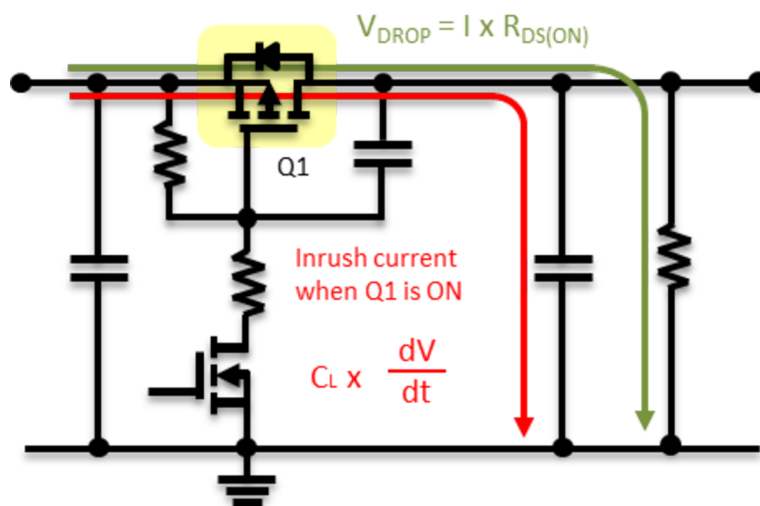


PANJIT's advanced P-channel MOSFETs are engineered to minimize $R_{DS(ON)}$ while maximizing avalanche ruggedness and space efficiency. With AEC-Q101 qualification and a high junction temperature of 175°C, they are an ideal choice for automotive design engineers looking to simplify circuitry and enhance performance. PANJIT's P-channel MOSFETs help reduce the complexity of power circuit design and are available in a wide range of packages, including SOT-23, SOT23 6L, DFN2020BW-6L, DFN3333-8L, DFN5060-8L, and TO-252AA.

► Key Features

- P-channel enhancement mode logic level MOSFETs
- 100% unclamped inductive switching (UIS) tested
- Low $R_{DS(ON)}$ to minimize conduction losses
- 175°C operating junction temperature
- AEC-Q101 qualified and PPAP capable
- Package with low thermal resistance

► Typical Load Switch

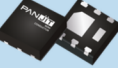


➤ Target Applications

- Power management function
- Reverse polarity protection
- Battery power equipment
- Primary 12/24 V systems
- LED lighting
- Infotainment
- Telematics
- ADAS
- Solenoid and motor drivers
- Brushed DC motors
- Electronic steering
- DC fan

➤ Recommended Products for 12 V and 24 V Systems

V_{DS}	V_{GS}	$R_{DS(ON)}$ @10 V		Q_g @10 V	V_{th}	DFN3333-8L	DFN5060-8L	TO-252AA
		Typ.	Max.					
V	V	mΩ		nC	V			
-40	±20	37	45	8.3	-1.6	PJQ4453P-AU	PJQ5453-AU	PJD16P04-AU
		14	17	19	-1.6	PJQ4441P-AU	PJQ5445-AU	PJD45P04-AU
		10	12	23	-1.6	PJQ4443P-AU	PJQ5443-AU	PJD50P04-AU
		4.5	6.5	128	-1.6	-	PJQ5441-AU	PJD100P04-AU

V_{DS}	V_{GS}	$R_{DS(ON)}$ @10 V		Q_g @10 V	V_{th}	SOT-23	SOT-23 6L	DFN2020BW-6L	DFN3333-8L	DFN5060-8L	TO-252AA
		Typ.	Max.								
V	V	mΩ		nC	V						
-60	±20	160	200	9	-1.7	PJA3461S-AU	PJS64613-AU				
		67.4	84	18	-1.7		PJS64611-AU	PJQ24611AW-AU	PJQ44611AP-AU		
		50	62	22	-1.7	-	-	PJQ24609AW-AU	PJQ44609AP-AU	PJQ54609A-AU	
		33	41	35	-1.7	-	-	-	PJQ44607AP-AU	PJQ54607A-AU	PJD30P06A-AU
		22.3	28	44	-1.7	-	-	-	PJQ44605AP-AU	PJQ54605A-AU	PJD40P06A-AU
		16.6	21	49	-1.7	-	-	-	-	PJQ54603A-AU	PJD50P06A-AU
		9.9	12.3	89	-1.7	-	-	-	-	PJQ54601A-AU	PJD60P06A-AU

➤ Recommended Products for 48 V Systems

V_{DS}	V_{GS}	$R_{DS(ON)}$ @10 V		V_{th}	SOT-23	SOT-23 6L	DFN2020BW-6L	DFN3333-8L	DFN5060-8L	TO-252AA
		Typ.	Max.							
V	V	mΩ		V						
-80	±20	286	360	-1.7	PJA34817-AU	PJS64817-AU	PJQ24817AW-AU			
		135	170	-1.7	-	PJS64815-AU	PJQ24815AW-AU	PJQ44815AP-AU		
		100	125	-1.7	-	-	PJQ24813AW-AU	PJQ44813AP-AU	PJQ54813A-AU	
		67	85	-1.7	-	-	-	PJQ44811AP-AU	PJQ54811A-AU	PJD30P08A-AU
		43	54	-1.7	-	-	-	PJQ44809AP-AU	PJQ54809A-AU	PJD45P08A-AU
		29	36.3	-1.7	-	-	-	-	PJQ54807A-AU	PJD50P08A-AU
		22.8	28.5	-2.8	-	-	-	-	PJQ54803-AU	PJD60P08-AU

*Under development with samples available - Package Limitation