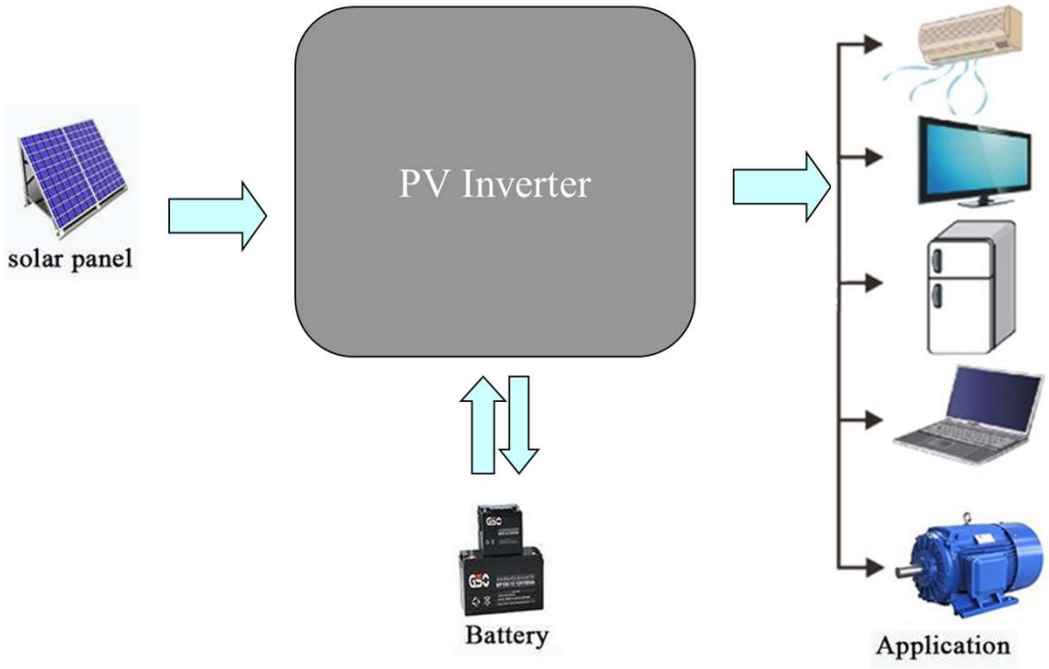
MOSFET Applications

Photovoltaic Inverter (PV Inverter/ Solar Inverter)



Key features and benefits

- MOSFETs should be rated should be at 600V or 650V, will provide more than adequate protection against the threat of high voltage transients.
- Switching losses can be mitigated and system efficiencies elevated, the inclusion of fast recovery diodes (FRDs) may be necessary. The tuning of the body diode of the MOSFET, as FRD can reduce the switching losses considerably.
- Must be given to how the balancing of MOSFET conduction and switching losses can affect system performance.
- MOSFET's gate charge (Qg) will be influence on its switching capabilities.
- Lower Qg allowing high frequencies to be supported, but will conversely lead to higher $RDS_{(ON)}$ and increase power losses.

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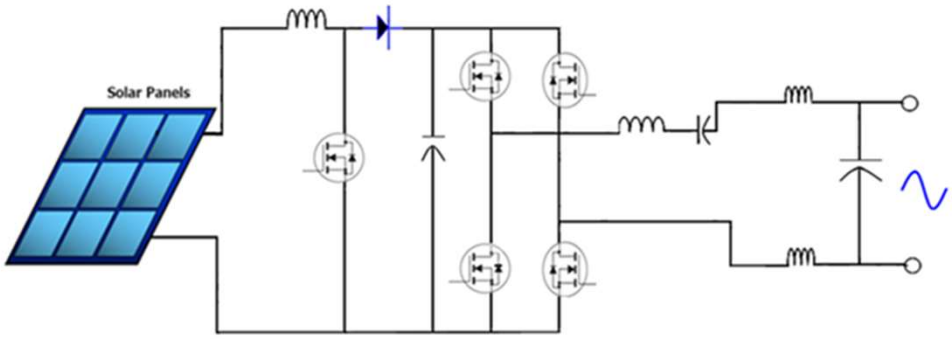

Products Selection

Voltage(V)	Package	PN#	Rds(ON)(mΩ) Vgs@10V	Qg(nC)
600	TO-247	CEW43N60SF	68	74
	TO-220	CEP22N60S	127	39
	TO-220F	CEF22N60S	127	39
		CEF15N60SA	280	25
650	TO-247	CEW20N65SA	180	42
		CEW46N65SA	56	100
		CEW46N65SF	58	92
		CEW38N65SA	95	69
		CEW38N65SF	100	67
	TO-220	CEP20N65SA	180	42
		CEP20N65SF	190	43
		CEP46N65SA	56	100
		CEP46N65SF	58	92
		CEP38N65SA	95	69
		CEP38N65SF	100	67
		CEP13N65S	320	25
		CEP11N65S	420	19
		CEP25N65CS	125	42
	TO-220F	CEF13N65S	320	25
		CEF11N65S	420	19
		CEF07N65SA	650	12
	TO-263	CEB20N65SA	180	42
		CEB25N65CS	125	42
		CEB11N65S	420	19
	TO-252	CEU11N65S	420	19
		CEU07N65SA	650	12