ACM075R036TH

N-Channel Silicon Carbide Power MOSFET

Product Summary

$V_{(BR)DSS}$	$R_{DS(on)MAX}$	I_D@25℃
750V	60mΩ@15V	70A

Feature

- Wide bandgap SiC MOSFET technology
- Low On-Resistance with High Blocking Voltage
- Low Capacitances with High-Speed switching
- Low reverse recovery(Qrr)

Application

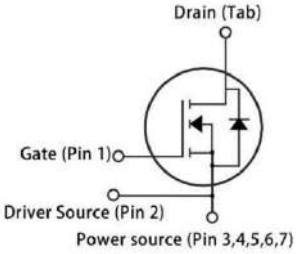
- Switch Mode Power Supplies
- Renewable Energy
- On Board Charger
- High Voltage DC/DC Converters

Package

TO-263-7L

Marking

Circuit diagram



Absolute maximum ratings (T_C=25℃ unless otherwise noted)

Parameter	Symbol	Test Condition	Value	Unit
Drain-Source Voltage	V_{DSmax}	V_{GS} = 0V, I_D =100μA	750	V
Gate-Source Voltage	V_{GSmax}	AC (f > 1 Hz)	-10/+25	V
Gate-Source Voltage	V_{GSOP}	Static	-4/+18	V
Continuous Drain Current	I_D	V_{GS}=18V	70	A
		V_{GS}=18V, T_C=100℃	49	A
Pulsed Drain Current	$I_{D,pulse}$	Pulse with t_p limited by T_{jmax}	121	A
Power Dissipation	P_D	T_J=175℃	214	W
Thermal Resistance（Typ）	$R_{\theta JC}$	Junction-to-Case	0.7	℃/W
Thermal Resistance（Typ）	$R_{\theta JA}$	Junction-to-Ambient	40	℃/W
Junction Temperature	T_J		-55 ~ +175	℃
Storage Temperature	T_{STG}		-55 ~ +175	℃