

Features

- Uses CRM(CQ) advanced SkyMOS1 technology
- Extremely low on-resistance $R_{DS(on)}$
- Excellent $Q_g \times R_{DS(on)}$ product(FOM)
- Qualified according to JEDEC criteria

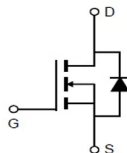
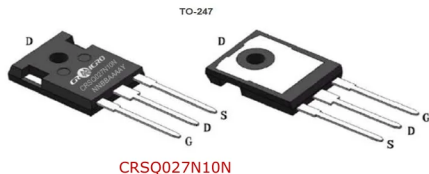
Applications

- Motor control and drive
- Battery management
- UPS (Uninterruptible Power Supplies)

Product Summary

V_{DS}	100V
$R_{DS(on)}$	2.6mΩ
I_D	180A

100% Avalanche Tested
100% DVDS Tested



Package Marking and Ordering Information

Part #	Marking	Package	Packing	Reel Size	Tape Width	Qty
CRSQ027N10N	-	TO-247	Tube	N/A	N/A	25/30pcs

Absolute Maximum Ratings

Parameter	Symbol	Value	Unit
Drain-source voltage	V_{DS}	100	V
Continuous drain current	I_D	273	A
$T_C = 25^\circ\text{C}$ (Silicon limit)		180	
$T_C = 25^\circ\text{C}$ (Package limit)		177	
$T_C = 100^\circ\text{C}$ (Silicon limit)			
Pulsed drain current ($T_C = 25^\circ\text{C}$, t_p limited by T_{Jmax})	$I_{D \text{ pulse}}$	720	A
Avalanche energy, single pulse ($L=0.5\text{mH}$, $R_g=25\Omega$) ^[1]	E_{AS}	529	mJ
Gate-Source voltage	V_{GS}	±20	V
Power dissipation ($T_C = 25^\circ\text{C}$)	P_{tot}	454	W
Operating junction and storage temperature	T_J, T_{stg}	-55...+150	°C

Notes: 1. EAS was tested at $T_J = 25^\circ\text{C}$, $I_D = 46\text{A}$.