

ReLaEx Demo RX-SIC650-DEMO

N-channel power MOSFET

Datasheet Revision A 2025-06

SYNTHETIC TEST DOCUMENT - not a real part, values are invented.

Absolute Maximum Ratings

Parameter	Symbol	Conditions	Value	Unit
Drain-source voltage	VDS		650	V

Electrical Characteristics

Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Unit
Drain-source on-state resistance	RDS(on)	VGS = 18 V, ID = 40 A, Tj = 25 °C			30	mΩ
Total gate charge	QG	VGS = 18 V, VDS = 400 V, ID = 40 A		80		nC

Thermal Characteristics

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Thermal resistance, junction to case	RthJC				0,45	K/W