SiC MOSFET



TO-247-4L

Features

VDS	RDS(on) typ.	ID
3300V	120mΩ	/

Benefits

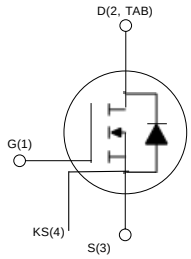
Very fast and robust intrinsic body diode

Extremely low gate charge and input capacitance

Very high operating junction temperature capability (T_J = 175 °C)

Applications

Industrial applications



Electrical characteristics

T_C = 25 °C unless otherwise specified.

Table 1. On/off states

Symbol	Parameter	Test conditions	Min.	Typ.	Max.	Unit
$V_{(BR)DSS}$	Drain-source breakdown voltage	V_{GS} = 0 V, I_D = 250 uA	3300			V
I_{DSS}	Zero gate voltage drain current	V_{DS} = 3300 V, V_{GS} = 0 V			10	μA
I_{GSS}	Gate-body leakage current	V_{DS} = 0 V, V_{GS} = -10 to 22 V			±100	nA
$V_{GS(th)}$	Gate threshold voltage	V_{DS} = V_{GS}, I_D = 5 mA	3.2	3.6	4.0	V
$R_{DS(on)}$	Static drain-source on-resistance	V_{GS} = 18 V, I_D = 20 A		120		mΩ
V_{SD}	Diode forward voltage	I_{SD} = 20 A, V_{GS} = 0 V	-	4.0	-	V
		I_{SD} = 20 A, V_{GS} = -4 V		4.2		