

UJ4C075023B7S

750V 23mO Normally-Off Gen4 SiCFET in D2PAK-7L

Package Type: D2PAK-7L
Process Technology: SiC, Si
Qualification Standard: AEC-Q101
Date Issued: 1/31/2023
Document Number: UJ4C075023B7S-PQ030

TEST NAME	TEST STANDARD AND CONDITIONS	# SAMPLES x # LOTS	TEST RESULTS
ESD Human Body Model (ESD HBM)	ANSI/ESDA/JEDEC JS-001, TA = 25 °C	3x3 lots	Class 2
ESD Charge Device Model (ESD CDM)	ANSI/ESDA/JEDEC JS-002, TA = 25 °C	3x3 lots	Class C3
Moisture Sensitivity Level (MSL)	IPC/JEDEC J-STD-020: Classification Temperature Tc = 245 °C	77pcs x 3 lots x 4 tests 77pcs x 3 lots x 2 tests 22pcs x 3 lots x 2 tests	MSL 1
High Temperature Gate Bias (HTGB)	JESD22-A108: T _J = 175°C, V _{GS} = +20V, 1000 hrs	77pcs x 3 lots (1k hrs) 22pcs x 3 lots (3k hrs)	Pass
High Temperature Reverse Bias (HTRB)	MIL-STD-750-1 M1038 Method A: T _J = 175°C, V _{DS} = 80% V _{DS, MAX} = 960V 1000 hrs/3000hrs	77pcs x 3 lots (1k hrs) 22pcs x 3 lots (3k hrs)	Pass
High Humidity, High Temperature Reverse Bias (H3TRB) [†]	JESD22-A101C: T _A = 85°C, 85% RH, V _{GS} = 0V, V _{DS} = 100V, 1000 hrs/3000 hrs <i>Preconditioned to MSL 1 per JESD22-A113</i>	77pcs x 3 lots (1k hrs) 22pcs x 3 lots (3k hrs)	Pass
Autoclave/Pressure Cooker Test (AC/PCT) [†]	JESD22-A102: 121°C, RH = 100%, 15psig, 96 hrs/500 hrs <i>Preconditioned to MSL 1 per JESD22-A113</i>	77pcs x 3 lots (96 hrs) 77pcs x 3 lots (500 hrs)	Pass
Temperature Cycling (TC) [†]	JESD22-A104: -55°C to +150°C, 2 cycles/hour, 1000 cyc/3000 cyc <i>Preconditioned to MSL 1 per JESD22-A113</i>	77pcs x 3 lots (1k cyc) 77pcs x 3 lots (3k cyc)	Pass
Intermittent Operating Life (IOL) [†]	MIL-STD-750 Method 1037: ΔT _J ≥ 125°C, 3000 cycles/18,000 cycles (5 minutes on/ 5 minutes off) <i>Preconditioned to MSL 1 per JESD22-A113</i>	77pcs x 3 lots (3k cyc) 22pcs x 3 lots (18k cyc)	Pass
Conclusion	This part meets Qorvo's product qualification requirements for AEC-Q101.		

Qualification Samples:

UJ4C075023B7S – 3 Lots
UJ4C075060B7S – 3 Lots

Products Qualified by Similarity:

UJ4C075044B7S
UJ4C075033B7S

UJ4C075023B7S

ESD Qualification Report

Package Type: D2PAK-7L
Process Technology: SiC, Si
Qualification Number: AW1048 ESD testing
Date Issued: 10/18/2018
Document Number: UJ4C0750023B7S-PQ030

Model	HBM	All Pins Tested
Class Rating	Class 2, >2000V, <4000 V	
Test Specification	JS-001 Table 2B	

Model	CDM	All Pins Tested
Class Rating	Class C3 Pass >1000V	
Test Specification	JS-002	