C3M0030090K
Transition Guide

Wolfspeed SEPTEMBER 2024

900/1000V → 1200V TRANSITION

- Transitioning to 1200V class devices provides:
  - Increased $R_{DS(ON)}$ options
  - Increased package options
  - Improved availability and lead times
  - Broader range of applications supported
  - Increased scalability across power levels
- Comparable 1200V products offer potential drop-in solutions for existing designs

SUGGESTED REPLACEMENT

	C3M0030090K	C3M0032120K	Notes
Status	EOL issued Oct 2024	Active	Already qualified for production on 200mm
$V_{DS\ max}$ (V)	900	1200	Increased V_{DS} margin
V_{GS} (V)	-4/+15	-4/+15	Compatible gate voltages
I_D (A)	73	69	
$R_{DS(ON)}$ (mΩ)	30	32	Slightly higher conduction losses
C_{oss} (pF)	144	129	Reduced output capacitance improves switching speed
C_{iss}/C_{rss}	301	420	Reduced impact of miller capacitance
Q_G (nC)	74	118	
$R_{G(int)}$ (Ω)	3	1.7	
$R_{\theta JC}$ (C/W)	0.48	0.44	Slightly better thermal impedance
Package	TO-247-4	TO-247-4	Fully Compatible
Pricing			Improved price

All parameters are typical values at 25 °C unless noted

NEXT STEPS

- Samples of recommended replacements available through your Wolfspeed sales team, or at our online Sample Center
- Ask any technical questions to your Wolfspeed FAE or through our Power Applications Forum
- Utilize SpeedFit™ to simulate the performance of the recommended replacement devices
  - Keep in mind, dynamic behavior may be different, requiring a different gate resistor value
- The SpeedVal™ Kit evaluation platform may be utilized to compare the performance and switching behavior

THANK YOU