


# 600V Fast Recovery Epitaxial Diodes (FRED)


Taiwan Semiconductor announces an additional 600V Ultra fast diode for various power systems. The current ranges are from 1A~12A with multiple SMD packages such a SOD-123W, SOD-123HE, SOD-128, SMA, SMB, SMC and SMPC4.6U. The speedy switching with low  $V_F$  can reduce switching and conduction loss both to achieve the power efficiency maximized. Supporting customer's applications in automotive HV power electronics like OBC, traction inverter, and more.

## FEATURES

 **AUTOMOTIVE QUALIFIED AEC-Q101**

 **PLANAR TECHNOLOGY**

 **LOW LEAKAGE CURRENT**

  **$T_J$  max, up to 175°C**

 **LOW POWER LOSS HIGH EFFICIENCY**

## APPLICATIONS

 **ON-BOARD CHARGER**

 **SWITCHING MODE CONVERTERS AND INVERTERS**

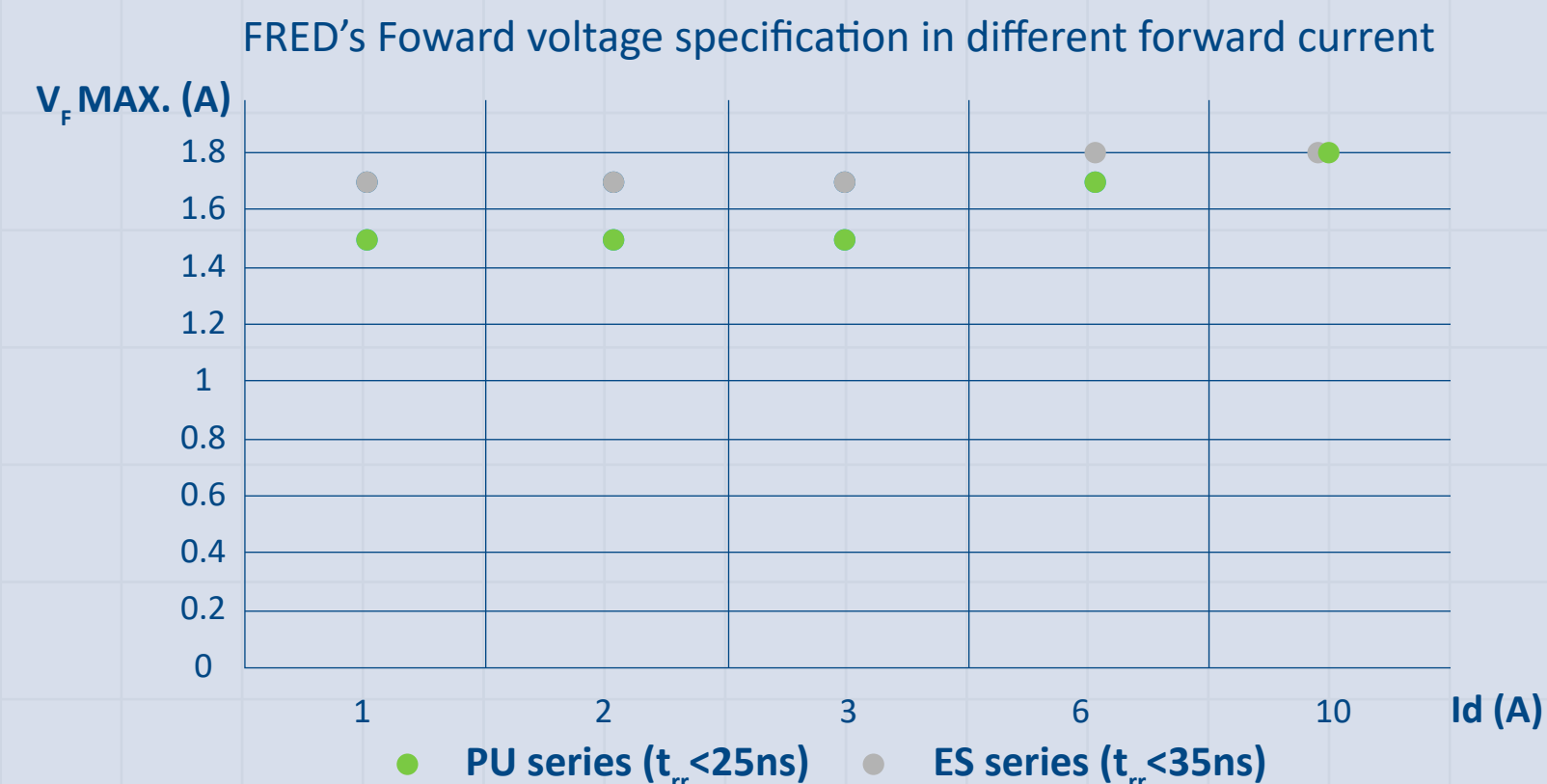
 **POWER FACTOR CORRECTION**

 **DC/DC CONVERTER**

## SPECIFICATION

**$T_J$  Max. (°C) =175**  
 **$t_{rr}$  (ns) =25**

Part number	Package	$V_{PPM}$ (V)	$I_F$ (A)	$V_F$ (V) Max.	$I_{fsm}$ (A)
PU1JLWH	SOD-123W	600	1	1.5	20
PU2JLWH			2	1.5	35
PU1JLSH	SOD-123HE		1	1.5	20
PU2JLSH			2	1.5	35
PU1JFSH	SOD-128		1	1.5	20
PU2JFSH			2	1.5	35
PU3JFSH			3	1.5	45
PU1JAH	SMA		1	1.5	20
PU2JAH			2	1.5	35
PU3JAH			3	1.5	45
PU2JBH	SMB		2	1.5	35
PU3JBH			3	1.5	45
PU6JBH		6	1.7	75	
PU3JCH	SMC	3	1.5	45	
PU6JCH		6	1.7	75	
PU8JCH		8	1.7	100	
PUUP3JH	SMPC4.6U	3	1.5	55	
PUUP6JH		6	1.7	85	
PUUP8JH		8	1.7	100	
PUUP10JH		10	1.8	115	
PUUP12JH		12	1.9	160	



**PU series provides less conduction and switching loss both than ES series.**



Official Website

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LinkedIn

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