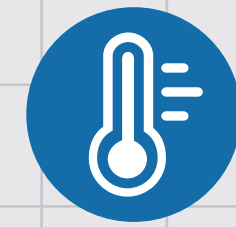


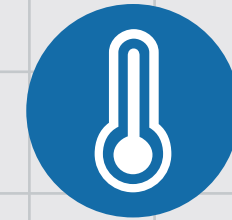
# Silicon Carbide (SiC) 650V MPS Schottky Diode

This TSCDx family of 650V silicon carbide Schottky barrier diodes is suitable for high-efficiency AC-DC, DC-DC, and DC-AC conversion applications. Unlike silicon-based fast-recovery rectifiers, these SiC devices have negligible switching losses due to low capacitive charge (QC). This makes them suitable for high-speed switching applications, benefitting circuit designs with increased power density and can reduce overall solution size.

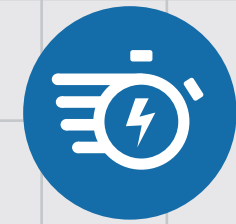
## FEATURES



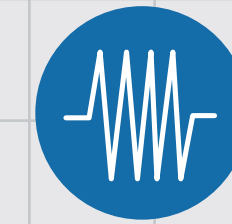
POSITIVE TEMPERATURE  
COEFFICIENT ON  $V_F$



$T_J$  MAX, UP TO  
**175°C**



HIGH-SPEED  
SWITCHING

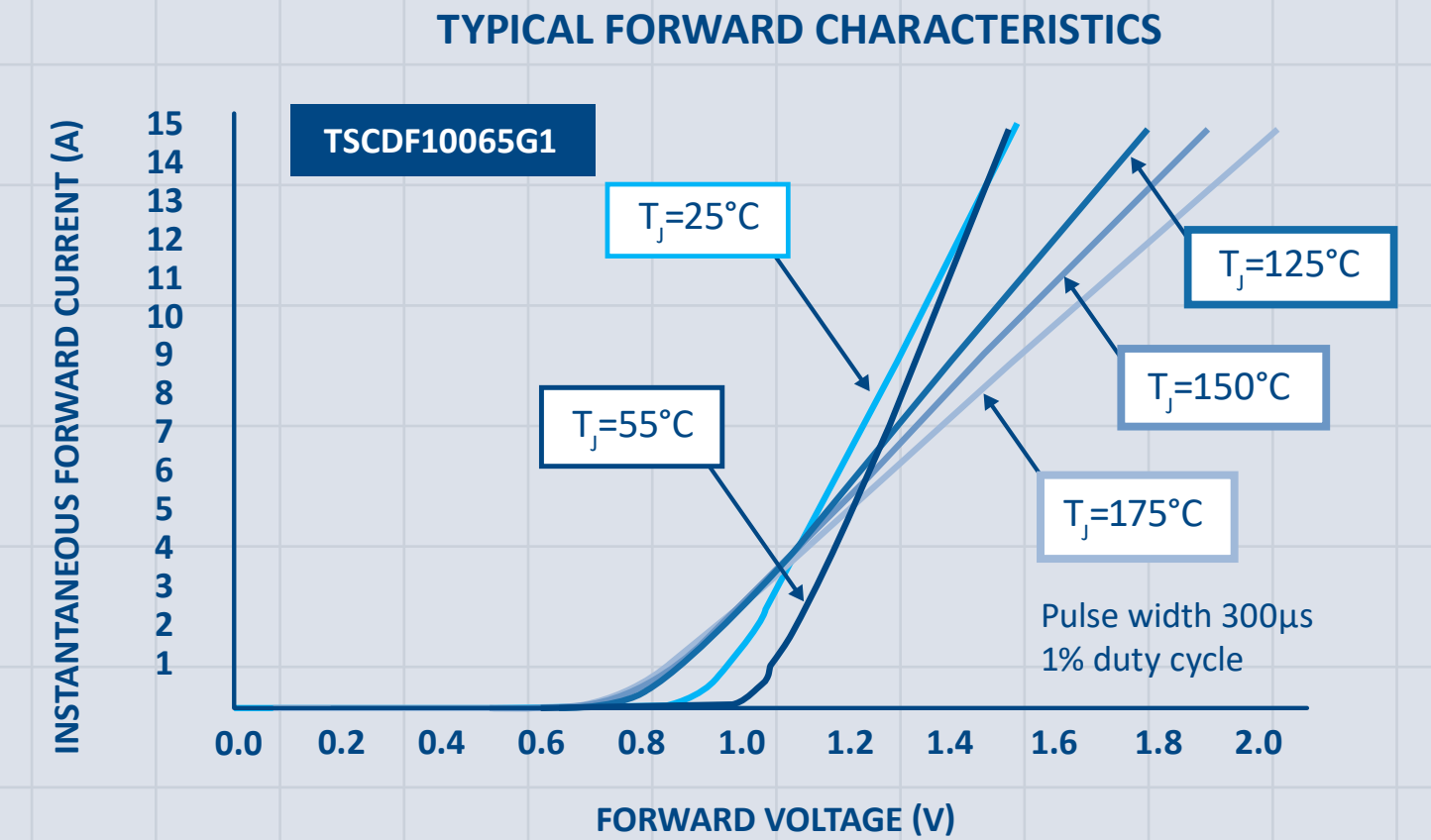


HIGH FREQUENCY  
OPERATION

## SPECIFICATION

$V_{RRM}$  (V) = 650

Part number	Package	$I_F$ (A)	$V_F @ T_A = 25^\circ\text{C}$		$I_R @ T_A = 25^\circ\text{C}$ Typ. ( $\mu\text{A}$ )	$I_R @ T_A = 175^\circ\text{C}$ Typ. ( $\mu\text{A}$ )	$I_{FSM}$ (A)	$Q_C$ Typ (nC)
			Typ.(V)	Max.(V)				
TSCDF06065G1	ITO-220AC-2L	6	1.32	1.45	0.37	5.32	44	20.8
TSCDF08065G1		8	1.35		0.61	5.5	72	27.12
TSCDF10065G1		10	1.34		0.8	5.42	84	31.7
TSCDF12065G1		12	1.36		0.75	10.1	88	37.16
TSCDF16065G1		16	1.38		0.87	9.6	100	49.03
TSCDF20065G1		20	1.38		1.37	11.3	128	65.57
TSCDT06065G1	TO-220AC-2L	6	1.32		0.37	5.32	44	20.8
TSCDT08065G1		8	1.35		0.61	5.5	72	27.12
TSCDT10065G1		10	1.34		0.8	5.42	84	31.7
TSCDT12065G1		12	1.36		0.75	10.1	88	37.16
TSCDT16065G1		16	1.38		0.87	9.6	100	49.03
TSCDT20065G1		20	1.38		1.37	11.3	128	65.57
TSCDH16065G1	TO-247-3L	16	1.33	0.61	9.08	68	29.18	
TSCDH20065G1		20	1.34	0.63	5.5	88	35.39	
TSCDH30065G1		30	1.36	0.96	9.61	128	54.36	
TSCDH40065G1		40	1.33	0.8	18.78	140	64.85	



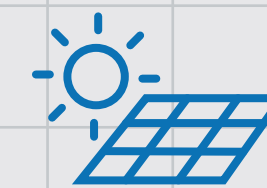
## APPLICATIONS



DATA CENTERS  
AND SERVER



AC-DC  
POWER SUPPLY



DC-DC SOLAR  
INVERTERS



TELECOM



Official Website



X



LinkedIn

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