

## SOD-882 Plastic Package Fast Switching Diode

Green Product



SOD882 Package



### Absolute Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
$P_D$	Power Dissipation	125	mW
$T_{STG}$	Storage Temperature Range	-55 to +125	$^\circ\text{C}$
$T_J$	Operating Junction Temperature	+125	$^\circ\text{C}$
$V_{RRM}$	Repetitive Peak Reverse Voltage	100	V
$V_R$	DC Reverse Voltage	75	V
$I_O$	Average Forward Current	150	mA
$I_{FSM}$	Non-repetitive Peak Forward Surge Current (Pulse Width=1us)	2	A

These ratings are limiting values above which the serviceability of the diode may be impaired.

### Specification Features:

- § High Speed Switching ( $T_{RR} < 4.0 \text{ nS}$ )
- § Small Surface Mounting Type (DFN1006)
- § RoHS Compliant
- § Green EMC
- § Matte Tin(Sn) Lead Finish
- § Band Indicates Cathode
- § Weight: approx. 0.001g

### DEVICE MARKING CODES:

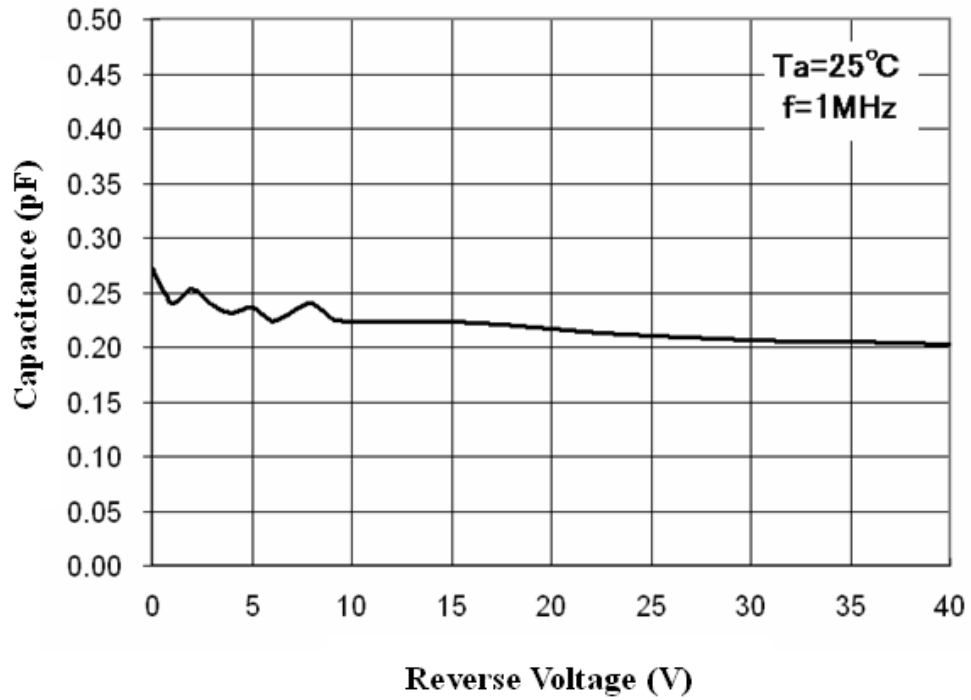
Device Type	Marking	Shipping
CDSQR4148	S3	10,000/Tape & Reel

### Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

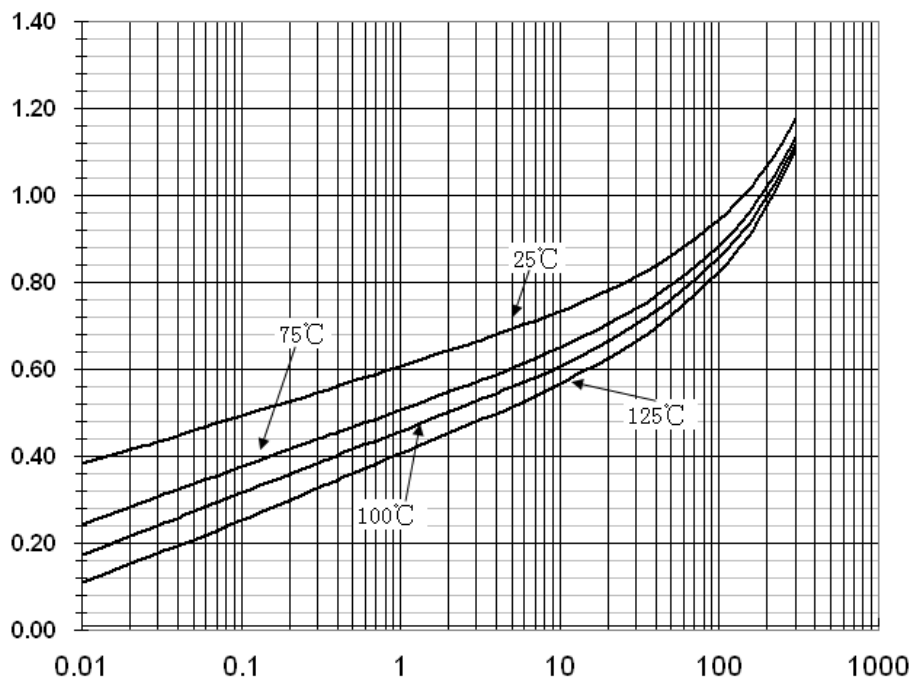
Symbol	Parameter	Test Condition	Limits		Unit
			Min	Max	
$B_V$	Breakdown Voltage	$I_R=100\mu\text{A}$	100		Volts
		$I_R=5\mu\text{A}$	75		
$I_R$	Reverse Leakage Current	$V_R=20\text{V}$		25	nA
		$V_R=75\text{V}$		5	$\mu\text{A}$
$V_F$	Forward Voltage	$I_F=10\text{mA}$		1.0	Volts
$T_{RR}$	Reverse Recovery Time	$I_F=10\text{mA}, I_R=60\text{mA}, R_L=100\Omega, I_{RR}=1\text{mA}$		4	nS
$C$	Capacitance	$V_R=0\text{V}, f=1\text{MHz}$		4	pF

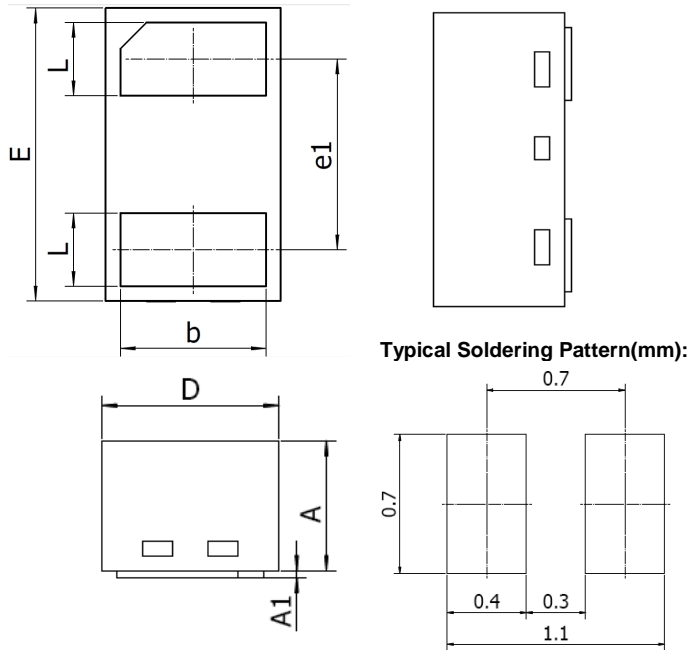
## Typical Performance Characteristics

Total Capacitance



Forward Voltage vs Ambient Temperature



**SOD882 Package Outline**


DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	0.46	0.50	0.018	0.020
A1	---	0.03	---	0.001
b	0.45	0.55	0.018	0.022
D	0.55	0.65	0.022	0.026
E	0.95	1.05	0.037	0.041
e1	Typ. 0.65		Typ. 0.026	
L	0.20	0.30	0.008	0.012

## NOTICE

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The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Tak Cheong Semiconductor Co., Ltd., or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

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