

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:

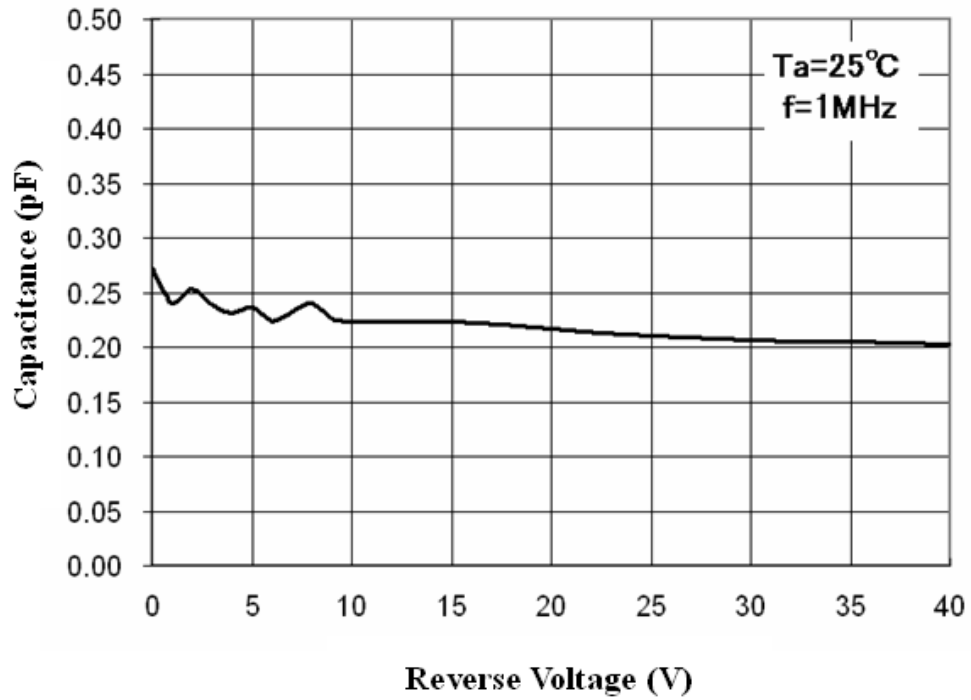
Device Type	Marking	Shipping
CDSQR4148	S3	10,000/Tape & Reel

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

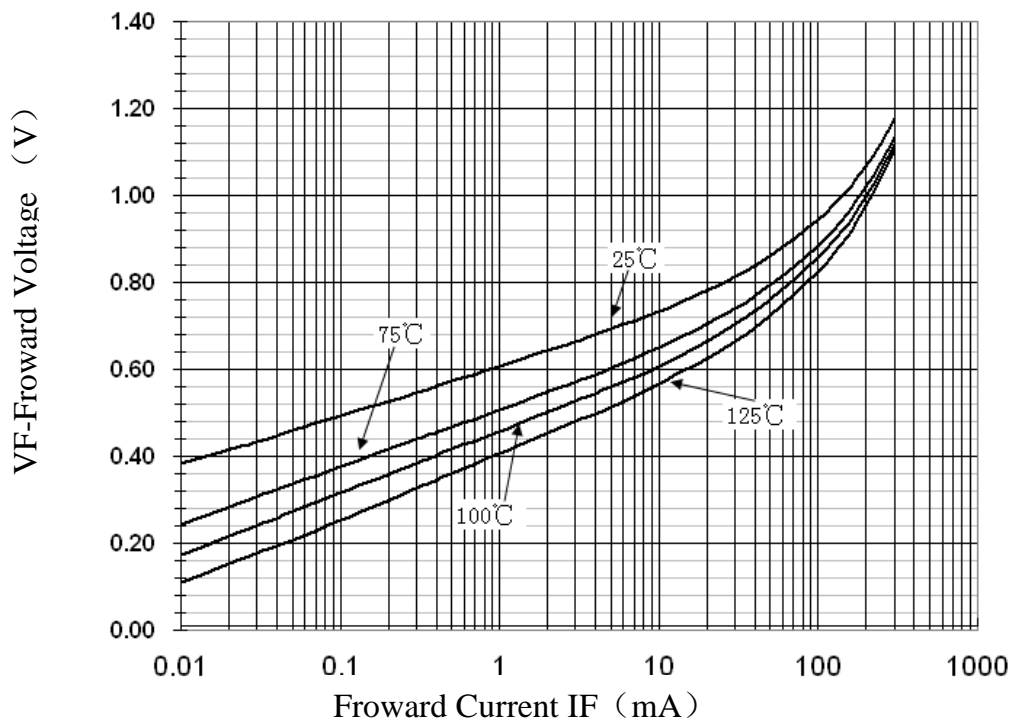
Symbol	Parameter	Test Condition	Limits		Unit
			Min	Max	
B_V	Breakdown Voltage	$I_R=100\mu\text{A}$	100		Volts
		$I_R=5\mu\text{A}$	75		
I_R	Reverse Leakage Current	$V_R=20\text{V}$		25	nA
		$V_R=75\text{V}$		5	μA
V_F	Forward Voltage	$I_F=10\text{mA}$		1.0	Volts
T_{RR}	Reverse Recovery Time	$I_F=10\text{mA},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

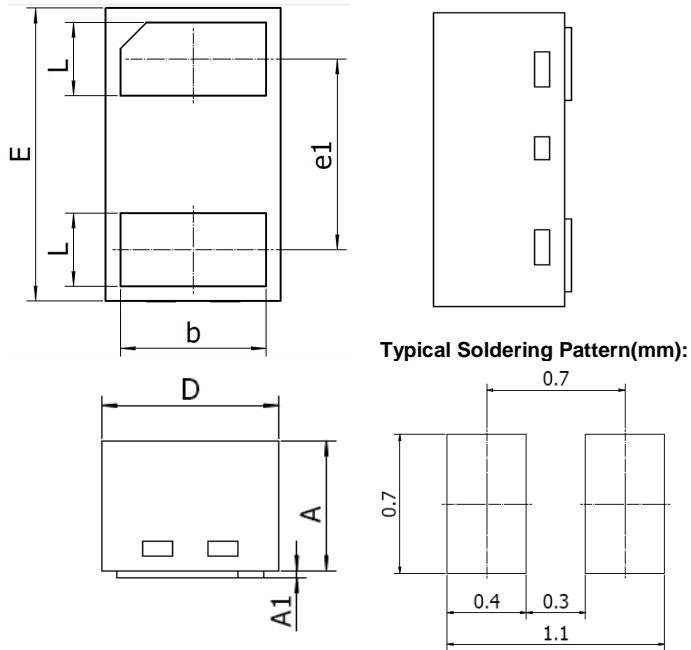
Typical Performance Characteristics

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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