

PRIMARY CHARACTERISTICS

V_{RRM}	30V
I_O	500mA
$V_F@I_F=100mA$	0.36V
$T_{J,Max}$	150°C

SOD-882

PACKAGE

Marking : X



M = Date Code

FEATURES

- Small surface mounting type
- Ultra low V_F ($V_F=0.45V$ Typ. at 0.5A)
- High reliability
- High-frequency rectification
- Switching regulators
- Moisture Sensitivity Level 1

MECHANICAL DATA

- Case : Molded plastic, SOD-882
- Polarity : Shown above
- Terminals : Plated terminals, solderable per MIL-STD-750, Method 2026
- Epoxy : UL94-V0 rated flame retardant

Absolute maximum ratings ($T_a = 25^\circ C$)

Parameter	Symbol	Limit	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Non-Repetitive Peak Reverse Voltage	V_{RSM}		V
Maximum DC Blocking Voltage	V_R	30	V
Average Forward Rectified Current	$I_F(AV)$	500	mA
Peak Forward Surge Current	I_{FSM}	3	A
Storage and Operating Temperature Range	T_j, T_{STG}	-65 to +150	degC

Electrical characteristics ($T_a = 25^\circ C$)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_{F1}	—	—	0.18	V	$I_F=0.1mA$
	V_{F2}	—	—	0.2	V	$I_F=1mA$
	V_{F3}	—	—	0.27	V	$I_F=10mA$
	V_{F4}	—	—	0.36	V	$I_F=100mA$
	V_{F5}	—	—	0.54	V	$I_F=500mA$
Reverse current	I_R	—	—	100	μA	$V_R=10V$
Reverse breakdown voltage	V_{BR}	30	—	—	V	$I_R=500\mu A$

●Electrical characteristic curves (Ta = 25°C)

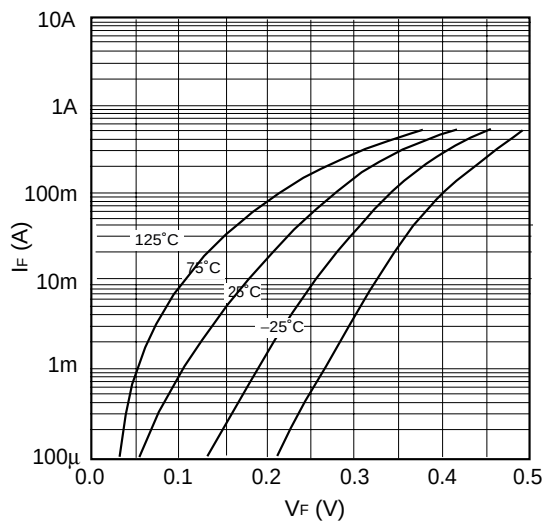


Fig.1 Forward current as a function of forward voltage (typical values)

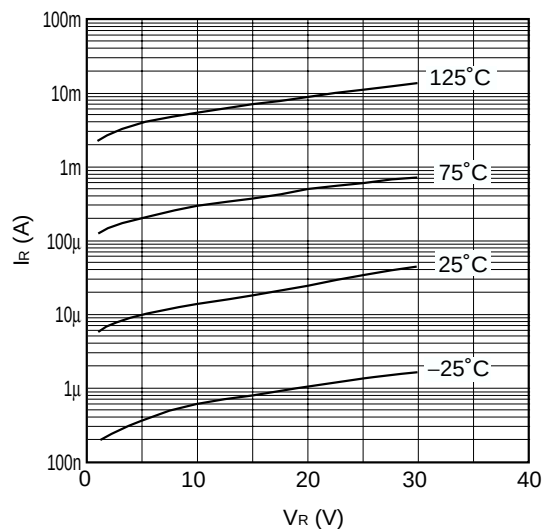


Fig.2 Reverse current as a function of reverse voltage (typical values)

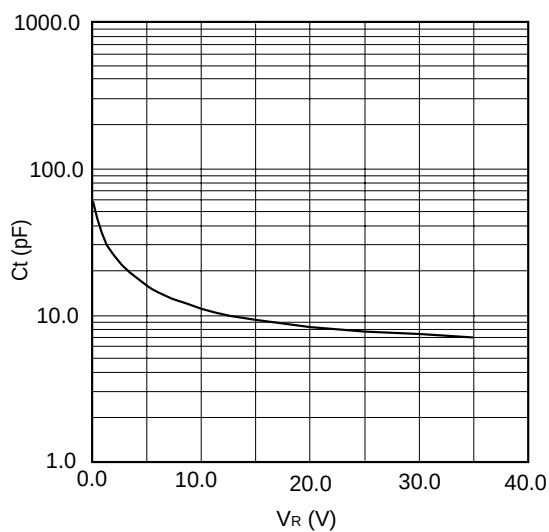
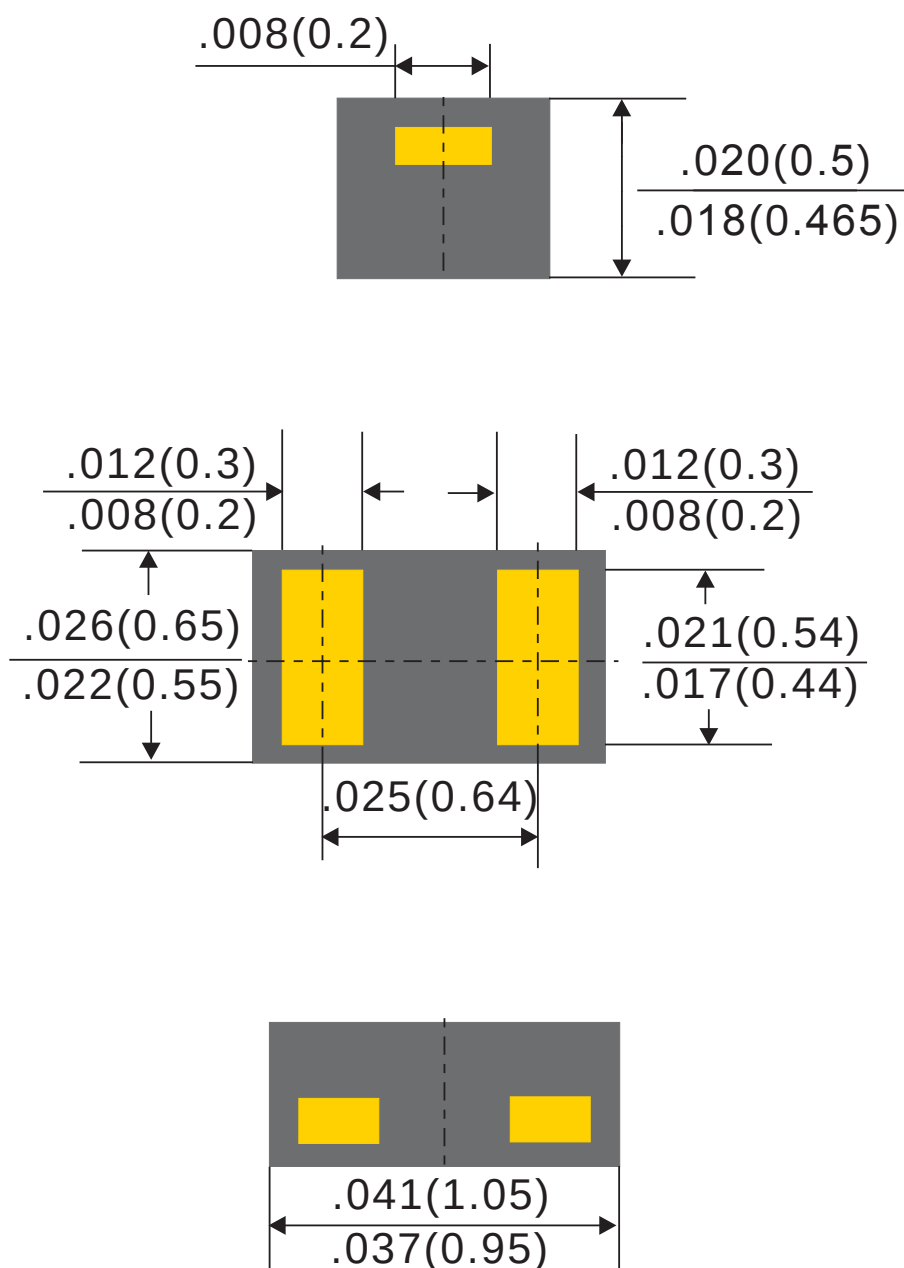


Fig.3 Diode capacitance as a function of reverse voltage (typical values)

Outline Drawing

SOD-882



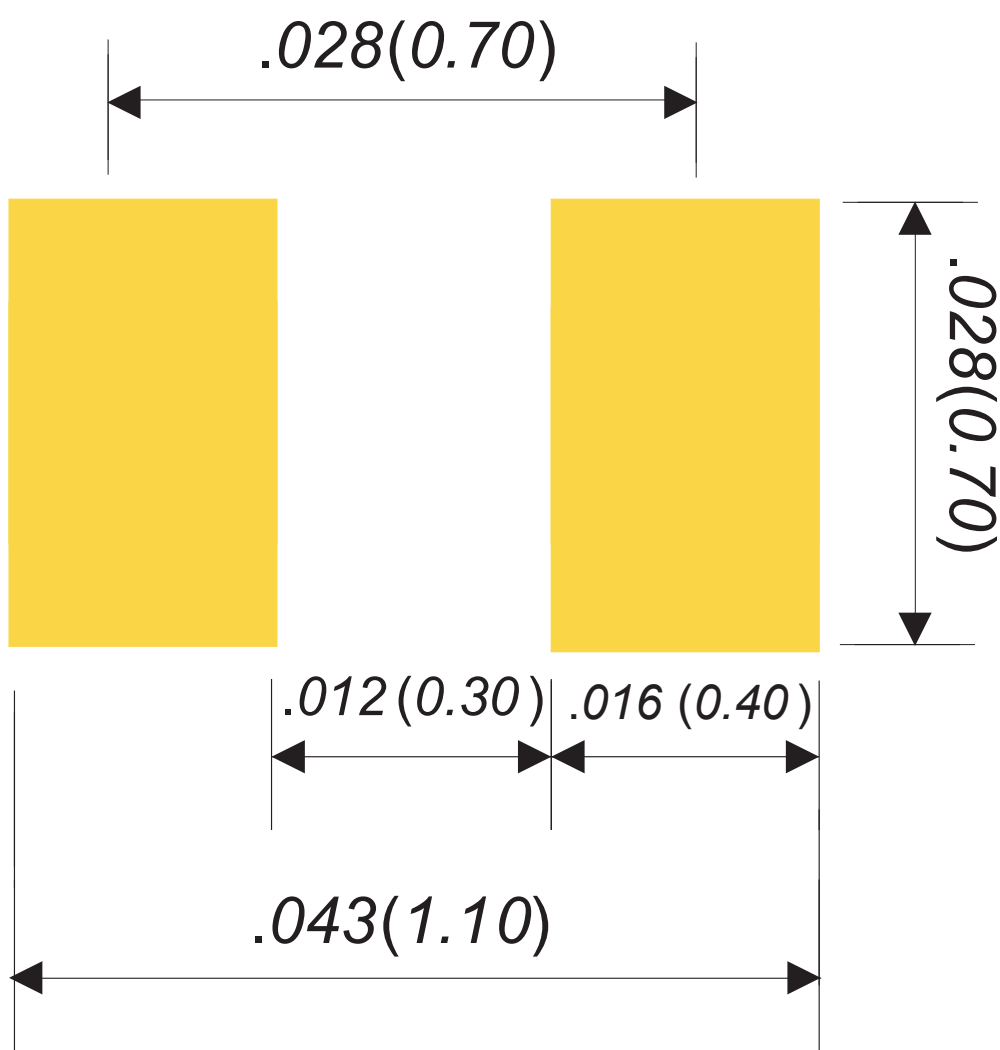
Dimensions in inches and (millimeters)

Rev.B



Suggested Soldering Pad Layout

SOD-882



Dimensions in inches and (millimeters)

RevA

Ordering Information:

Device PN	Packing
SCS551BS-30T5 ⁽¹⁾ H ⁽²⁾ -WS ⁽³⁾	Tape&Reel: 10 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) Halogen free product for packing code suffix “H”

(3) WS : Willas brand abbreviation, Label Type does not display

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