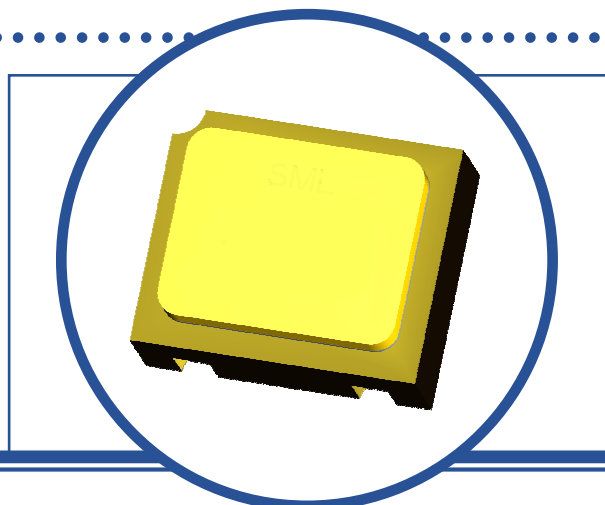


SCHOTTKY BARRIER DIODE

SML5082-2800CSM

- High Breakdown Voltage ($V_{BR} = 70V$)
- Low Forward Voltage
- Hermetic Ceramic Surface Mount Package
- Suitable for Low Current, Fast Switching Applications.
- Screening Options Available



ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ C$ unless otherwise stated)

V_{BR}	Breakdown Voltage	70V
I_F	Forward Current	35mA
P_D	Total Power Dissipation at $T_A = 75^\circ C$ Derate Above $75^\circ C$	250mW 2mW/ $^\circ C$
T_J	Junction Temperature Range	-65 to $+200^\circ C$
T_{stg}	Storage Temperature Range	-65 to $+200^\circ C$

THERMAL PROPERTIES

Symbols	Parameters	Max.	Units
$R_{\theta JA}$	Thermal Resistance, Junction To Ambient	500	$^\circ C/W$

Semelab Limited reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by Semelab is believed to be both accurate and reliable at the time of going to press. However Semelab assumes no responsibility for any errors or omissions discovered in its use. Semelab encourages customers to verify that datasheets are current before placing orders.



SCHOTTKY BARRIER DIODE SML5082-2800CSM

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise stated)

Symbols	Parameters	Test Conditions	Min.	Typ	Max.	Units
V _{BR}	Breakdown Voltage	I _R = 10μA	70			V
V _F ⁽¹⁾	Forward Voltage	I _F = 1.0mA			0.41	
		I _F = 15mA			1.0	
		T _A = -55°C			1.1	
I _R	Reverse Current	V _R = 50V			200	nA
			T _A = 150°C			200

DYNAMIC CHARACTERISTICS

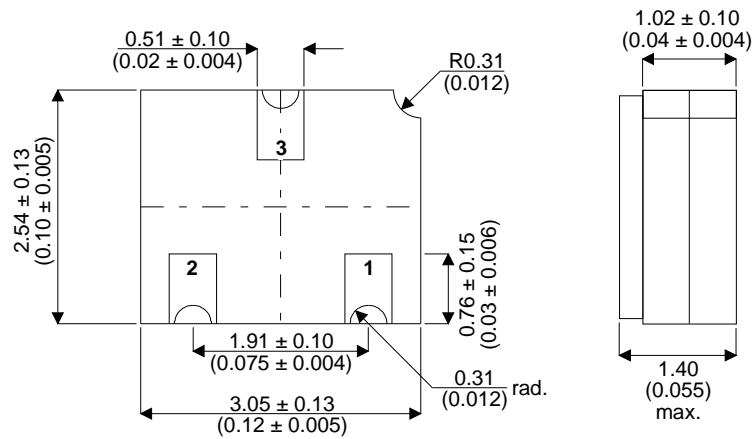
C _T	Capacitance	V _R = 0V	f = 1.0MHz		2.2	2.5	pF
τ ⁽²⁾	Minority Carrier Lifetime	I _F = 5mA				100	ps

Notes

- (1) Pulse Width ≤ 300us, δ ≤ 2%
- (2) By design only, not a production test.

MECHANICAL DATA

Dimensions in mm (inches)



LCC1
(Underside View)

Pad 1 - Anode

Pad 2 - N/C

Pad 3 - Cathode