

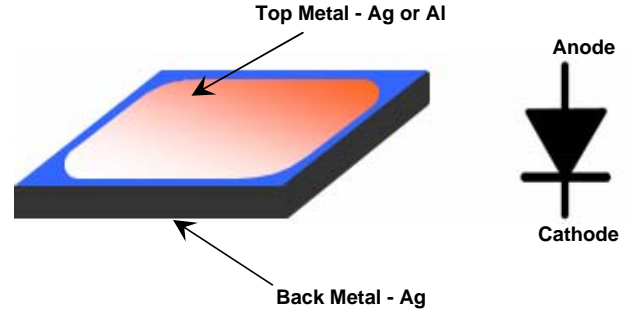
Schottky Rectifier Die Specification

40V 1A,32mil Schottky Rectifier, Standard VF

Product Type: MCSB140-32

Main Products Characteristics

- Average forward current: $I_{F(AV)} = 1\text{ A}$
- Maximum operating junction temperature: $T_j = 125\text{ °C}$
- Top metal: Ag or Al
- Wafer size: 6"
- PDPW: 23,500die/Wafer



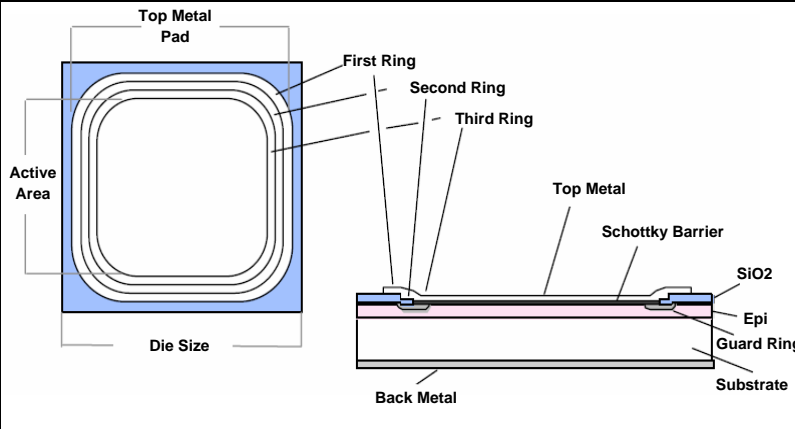
Maximum Ratings

Parameter	Symbol	Rating
		MCSB140-32
Repetitive peak reverse voltage	V_{RRM}	40 V
Average forward current	$I_{F(AV)}$	1 A
Non-repetitive peak surge current ($t_p = 8.3\text{ ms}$, halfwave, 1 cycle)	I_{FSM}	30 A
Storage temperature range	T_{stg}	-50 to +125 °C
Maximum operating junction temperature	T_j	125 °C

Static Electrical Characteristics ($T_a = 25\text{ °C}$)

Parameter	Symbol	Value
		MCSB140-32
Reverse breakdown voltage $I_R = 1\text{ mA}$	V_{BR}	45 V (Typical 52V)
Maximum forward voltage drop $I_F = 1\text{ A}$ Pulse Test: $t_p = 300\text{ }\mu\text{s}$, $\delta \leq 2\%$	V_F	0.50 V (Typical 0.47V)
Maximum reverse current $V_R = V_{RRM}$ Pulse Test: $t_p = 300\text{ }\mu\text{s}$, $\delta \leq 2\%$	I_R	0.1mA (Typical 0.015mA)

Device Schematics and Outline Drawing



Die Thickness *	11 Mils
Die Size **	32 Mils
Top Metal Pad	28 Mils
Active Area	25 Mils
Top Metal	Ag or Al
Back Metal	Ag

Note: 1 *: Also can offer device with other thickness (8~15 mils)
2 **: Cutting street width is around 0.7 mils

Important Notice

<p>Specification apply to die only. Actual performance may degrade when assembled.</p> <p>MCD Semiconductor does not guarantee device performance after assembly. All operating parameters must be validated for each customer application by customer's technical experts.</p> <p>Data sheet information is subjected to change without notice.</p>	<p>Recommended Storage Environment:</p> <p>Store in original container, in dessicated nitrogen, with no contamination.</p> <p>Shelf life for parts stored in above condition is 2 years.</p> <p>If the storage is done in normal atmosphere shelf life is reduced to 6 months.</p>
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