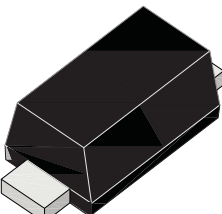





3.0 Amp. Surface Mount Schottky Barrier Rectifier

SOD128 	Voltage 60 V	Current 3.0 A	
	FEATURE <ul style="list-style-type: none"> • Low profile package • Ideal for automated placement • Guarding for overvoltage protection • Low power losses, high efficiency • Low forward voltage drop • High forward surge current capability • Solder dip 260 °C, 10s • AEC-Q101 qualified • Component in accordance to RoHS 2011/65/EU and WEEE 2002/96/EC • Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C • Very low leakage current 		   RoHS COMPLIANT
	MECHANICAL DATA <ul style="list-style-type: none"> • Case: SOD128. Epoxy meets UL 94V-0 flammability rating. • Polarity: Color band denotes cathode end. • Terminals: Matte tin plated leads, solderable per MIL-STD-750 Method 2026, J-STD-002 and JESD22-B102. Consumer grade, meets JESD 201 class 1A whisker test. • HE3 suffix for high reliability grade, meets JESD 201 class 2 whisker test. 		
	TYPICAL APPLICATIONS Used in low voltage high frequency inverters, freewheeling, dc-to-dc converters, and polarity protection applications.		

Maximun Ratings and Electrical Characteristics at 25 °C

		FSSL36Z
Marking Code		Z1
V_{RRM}	Maximum Recurrent Peak Reverse Voltage (V)	60
V_{RMS}	Maximum RMS Voltage (V)	42
V_{DC}	Maximum DC Blocking Voltage (V)	60
$I_{F(AV)}$	Forward Current at Tc (See graphic)	3.0 A
I_{FSM}	8.3 ms Peak Forward Surge Current (Jedec Method)	120 A
V_F	Maximum Instantaneous Forward Voltage @ $I_F = 3\text{ A}$ (Note 1)	0.5 V
I_R	Maximum DC Reverse Current at Rated DC Blocking Voltage (Note 3)	$T_j = 25^\circ\text{C}$ 100 μA
		$T_j = 125^\circ\text{C}$ 15 mA
T_j	Operating Temperature Range	-55°C to +150°C
T_{stg}	Storage Temperature Range	-65°C to +150°C
$R_{th(j-c)}$ $R_{th(j-a)}$	Typical Thermal Resistance (5x5 mm ² x 130 μ Copper Area) (Note 2)	12 °C/W
		60 °C/W

Notes:

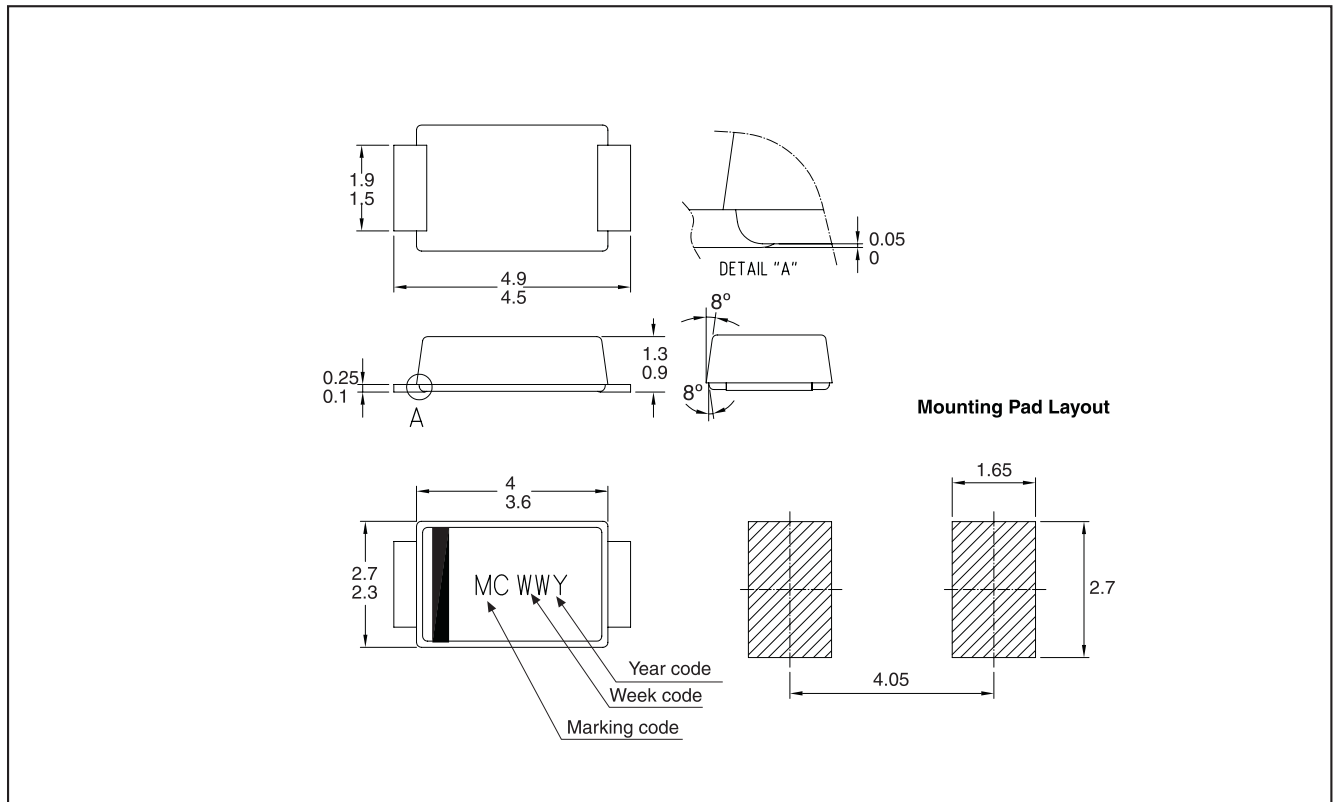
1. Pulse Test: 300 μ Pulse Width, 1% Duty Cycle
2. Thermal Resistance from Junction to Case per diode
3. Pulse Test: Pulse Width \leq 40ms

3.0 Amp. Surface Mount Schottky Barrier Rectifier

Ordering information

PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
FSSL36Z TRTB	TRTB	13" diameter tape and reel	10,000	0.0180
FSSL36Z HE3 TRTB	TRTB	13" diameter tape and reel	10,000	0.0180

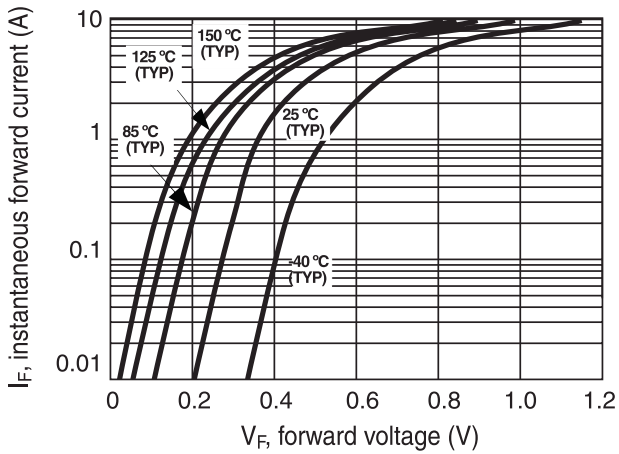
Package Outline Dimensions: (mm) SOD128



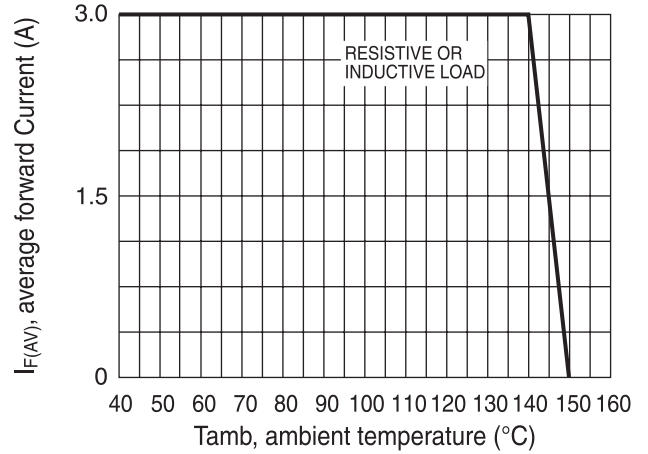
3.0 Amp. Surface Mount Schottky Barrier Rectifier

Ratings and Characteristics (Ta 25 °C unless otherwise noted)

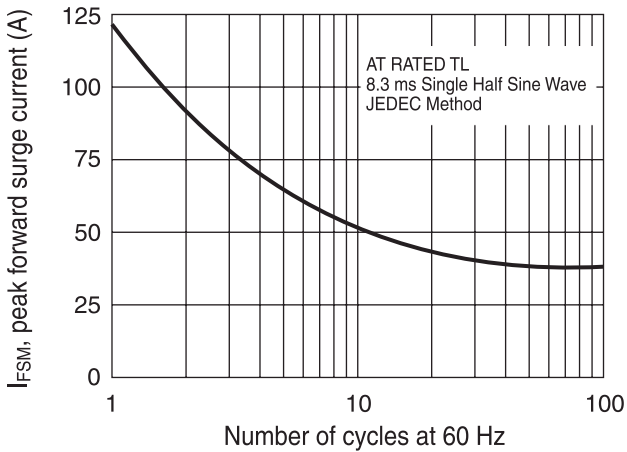
TYPICAL FORWARD CHARACTERISTIC



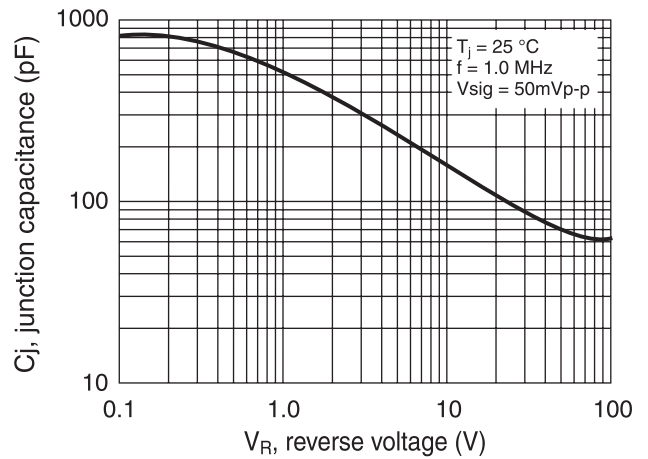
MAXIMUM FORWARD CURRENT DERATING CURVE



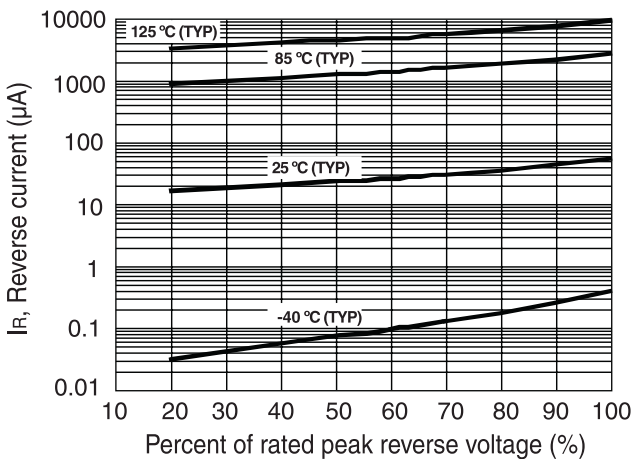
MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



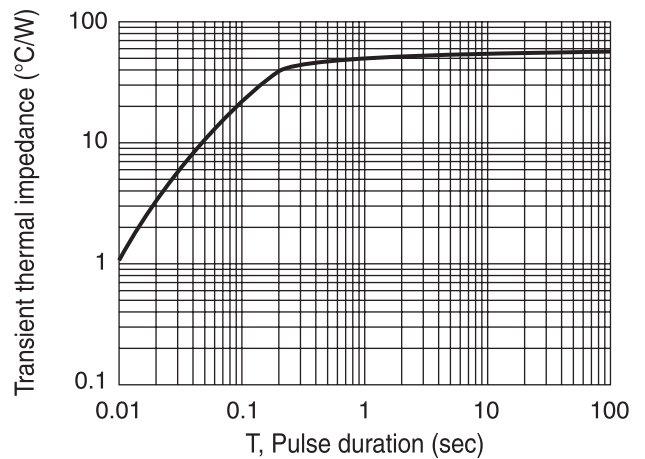
TYPICAL JUNCTION CAPACITANCE



TYPICAL REVERSE CHARACTERISTIC



TYPICAL TRANSIENT THERMAL IMPEDANCE



3.0 Amp. Surface Mount Schottky Barrier Rectifier

Revision History

DATE	REVISION	DESCRIPTION OF CHANGES
08-Jun-2020	0	Original Data Sheet

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