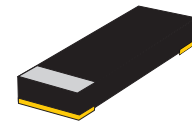


## CDSWM4148(RoHS Device)

High Speed

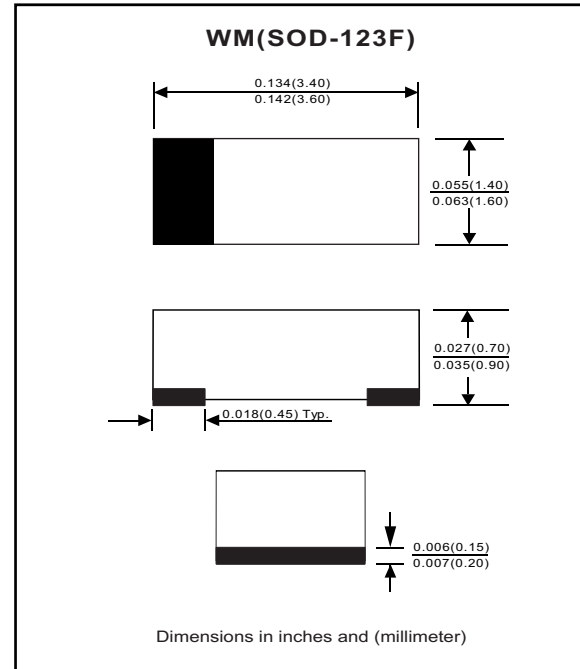


### Features

- Designed for mounting on small surface.
- Extremely thin / leadless package.
- High speed switching.
- High mounting capability, strong surge withstand ,high reliability.

### Mechanical data

- Case: SOD-123F molded plastic, fits onto footprint of minimelf and SOD-123 on PCB.
- Terminals: Gold plated, solderable per MIL-STD-750,method 2026.
- Polarity: Indicated by cathode band.
- Mounting position: Any
- Weight: 0.0115 gram(approx.).



### Maximum Rating (at TA=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Repetitive peak reverse voltage		V <sub>RRM</sub>			100	V
Reverse voltage		V <sub>R</sub>			75	V
Average forward current		I <sub>O</sub>			150	mA
Forward current,surge peak	T <sub>P</sub> = 1μS T <sub>P</sub> = 1mS	I <sub>FSM</sub>		4 1		A
Repetitive peak forward current		I <sub>FRM</sub>			300	mA
Power Dissipation		P <sub>D</sub>			350	mW
Thermal Resistance Junction To ambient air		R <sub>θJA</sub>			285	°C/W
Storage temperature		T <sub>STG</sub>	-55		+125	°C
Junction temperature		T <sub>J</sub>			+125	°C

### Electrical Characteristics (at TA=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I <sub>F</sub> = 50 mADC	V <sub>F</sub>			1.0	V
Reverse current	V <sub>R</sub> = 20 V V <sub>R</sub> = 75 V	I <sub>R</sub>			25 2.5	nA uA
Capacitance between terminals	f = 1 MHz,and 0VDC reverse voltage	C <sub>T</sub>			4	pF
Reverse recovery time	I <sub>F</sub> = I <sub>R</sub> 10 mA, R <sub>L</sub> =100 ohms, I <sub>rr</sub> = 1 mA	T <sub>RR</sub>			4	nS

## Rating and Characteristic Curves (CDSWM4148)

Fig. 1 - Forward characteristics

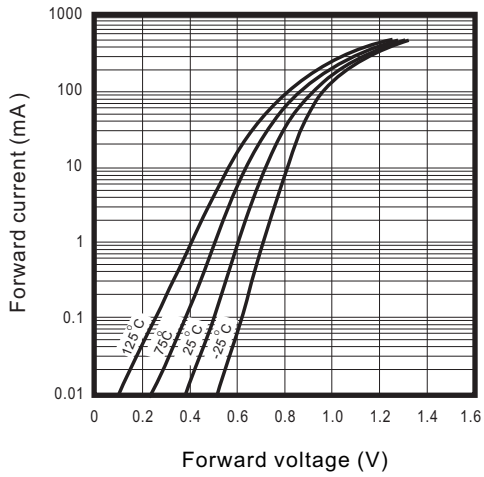


Fig. 2 - Reverse characteristics

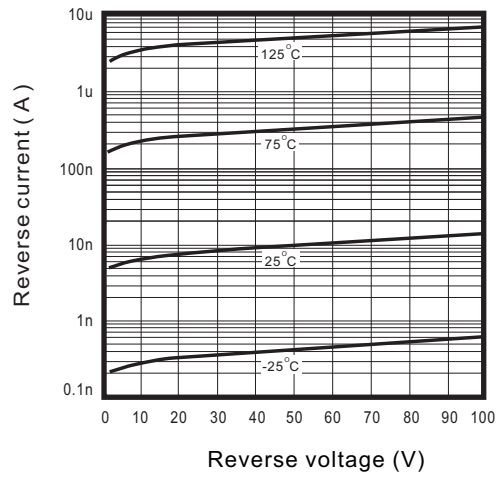


Fig.3 - Capacitance between terminals characteristics

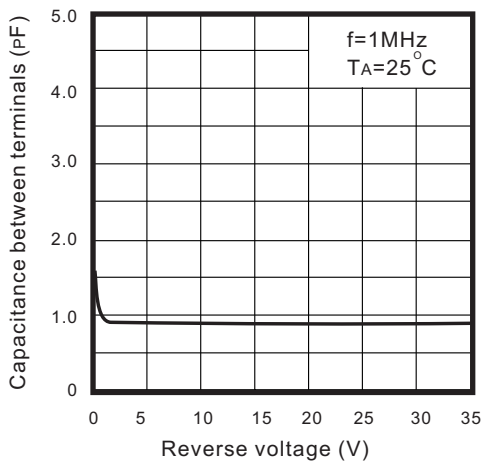


Fig.4 - Current derating curve

