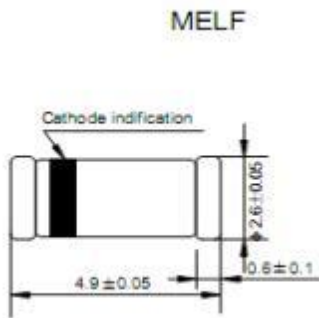


**Features**

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low reverse leakage
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- High temperature soldering : 250C/10 seconds at terminals



**Maximum Ratings & Thermal Characteristics**

(T<sub>A</sub> = 25 °C unless otherwise noted)

(Single phase half-wave 60HZ, resistive or induction load, for capacitive load current derate by 20%.)

Items	Symbol	SM4007	UNIT
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	700	V
Maximum DC blocking voltage	V <sub>DC</sub>	1000	V
Maximum average forward rectified current at T <sub>L</sub> =110C	I <sub>F(AV)</sub>	1.0	A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	20	A
Typical thermal resistance <sup>(1)</sup>	R <sub>θJA</sub>	75	C/ W
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +125	C

Note 1: P.C.B. mounted with 0.2x0.2”(5.0x5.0mm) copper pad areas

**Electrical Characteristics** (T<sub>A</sub> = 25 °C unless otherwise noted)

Items	Test conditions	Symbol	Min	Type	Max	UNIT
Instantaneous forward voltage	I <sub>F</sub> =1A <sup>(2)</sup>	V <sub>F</sub>	-	-	1.10	V
Reverse current	V <sub>R</sub> =V <sub>DC</sub> T <sub>J</sub> =25C T <sub>J</sub> =100C	I <sub>R</sub>	-	-	5 50	hA
Typical junction capacitance	4.0 V , 1MHz	C <sub>J</sub>	-	15.0	-	p F

Note 2: Pulse test:300hs pulse width,1% duty cycle.