

# ESTF8SS80RM

## Features

- Low profile package
- Ideal for automated placement
- Glass passivated pellet chip junction
- Low forward voltage drop
- Low leakage current
- High forward surge capability



SMC

## Applications

- For use in general purpose rectification of power supplies, inverters, converters, freewheeling diodes for consumer, automotive, and telecommunication

Cathode  Anode

## Absolute Maximum Ratings @ T<sub>c</sub>=25°C

Symbol	Parameter	ratings	Unit
V <sub>RRM</sub>	Repetitive peak reverse voltage @50μA	800	V
I <sub>F(AV)</sub>	Average forward current @T <sub>c</sub> =110°C	8 <sup>1</sup>	A
		1.6 <sup>2</sup>	A
I <sub>FSM</sub>	Peak one Cycle Surge Forward @t=8.3ms	200	A
T <sub>j</sub>	Junction Temperature	-55~+150	°C
T <sub>STG</sub>	Storage temperature range	-55~+150	°C

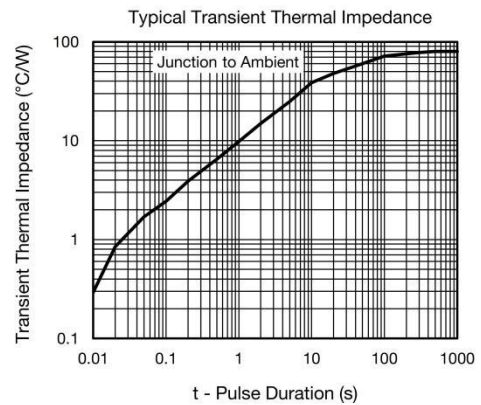
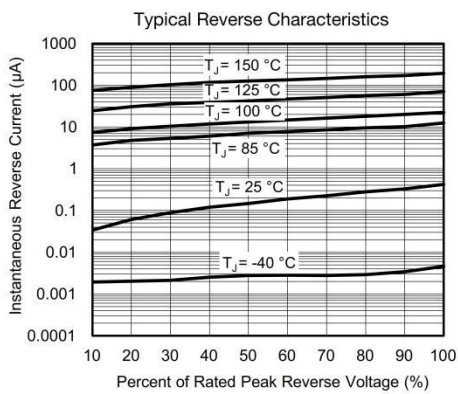
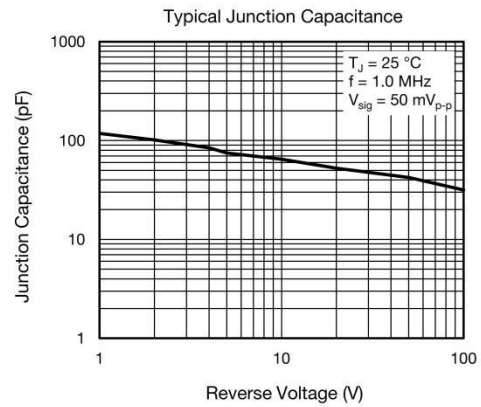
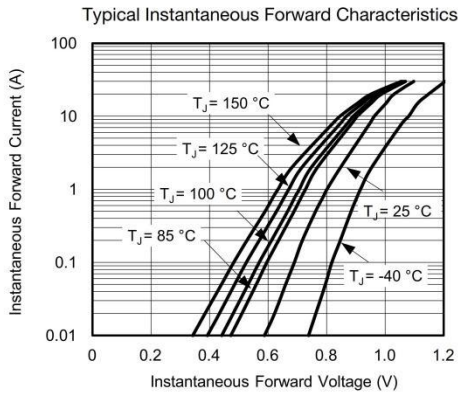
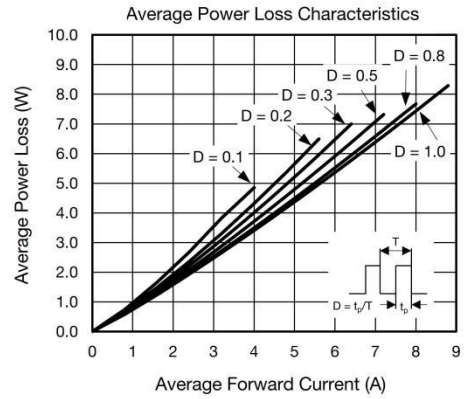
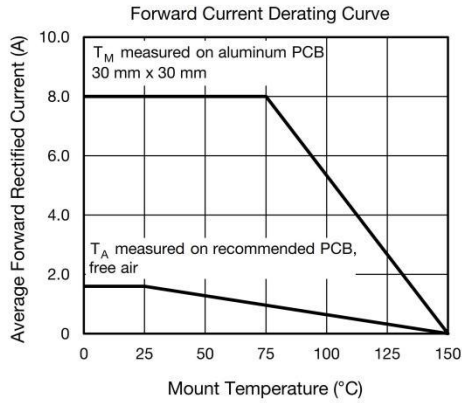
## Electrical Specifications @ T<sub>c</sub>=25°C

Symbol	Parameter		Ratings			Unit
			Min	Typ	Max	
I <sub>R</sub>	T <sub>j</sub> =25°C	V <sub>R</sub> =V <sub>RRM</sub>			10	μA
	T <sub>j</sub> =125°C				350	μA
V <sub>F</sub>	T <sub>j</sub> =25°C	I <sub>F</sub> =8A		0.96	0.985	V
	T <sub>j</sub> =125°C			0.87	0.935	V
T <sub>rr</sub>	I <sub>F</sub> =0.5A, I <sub>R</sub> =1A, I <sub>RR</sub> =0.25A			4		μs
C <sub>J</sub>	4.0V, 1MHz			79		pF
R <sub>th(j-A)</sub>	Thermal resistance			75		°C/W

### Notes

- (1) Mounted on aluminum PCB 30 mm x 30 mm with aluminum heatsink
- (2) Free air, mounted on recommended copper pad area

# Typical Performance Curves



Package

