



Features

- Metal silicon junction, majority carrier
- conduction For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability



SMC



Ordering Information

Product ID	Pack	Marking	Qty(PCS)
HSM840JE3/TR13	SMC	H84031KR	3000

Maximum Ratings (Ta=25°C unless otherwise noted)

Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Type Number	Limit	Units
Maximum Recurrent Peak Reverse Voltage	40	V
Maximum RMS Voltage	28	V
Maximum DC Blocking Voltage	40	V
Maximum Average Forward Rectified Current	8.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	150	A
Maximum Instantaneous Forward Voltage at 8.0A	0.55	V
Maximum DC Reverse Current Ta=25°C	0.1	μA
at Rated DC Blocking Voltage Ta=125°C	50	mA
Typical Junction Capacitance	600	pF
Typical Thermal Resistance R JA	35	°C/W
Operating Temperature Range Tj	-55 to +150	°C
Storage Temperature Range Tstg	-55 to +150	°C

Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.27" x 0.27" (7.0 mm x 7.0 mm) copper pad areas



Typical Characteristics

Fig.1 Forward Current Derating Curve

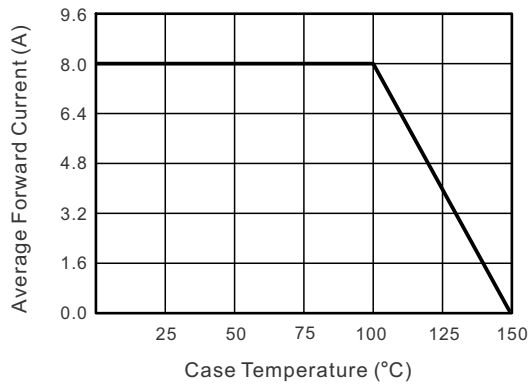


Fig.2 Typical Reverse Characteristics

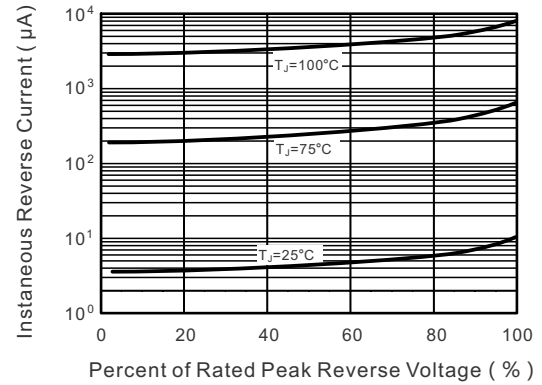


Fig.3 Typical Forward Characteristic

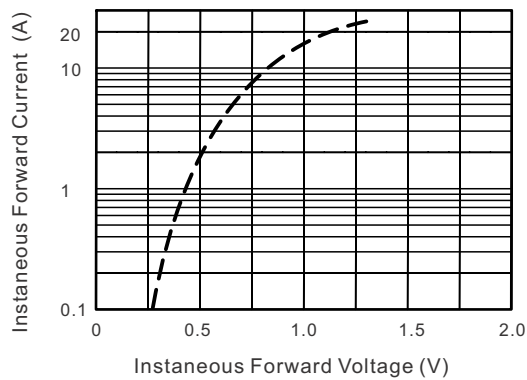


Fig.4 Typical Junction Capacitance

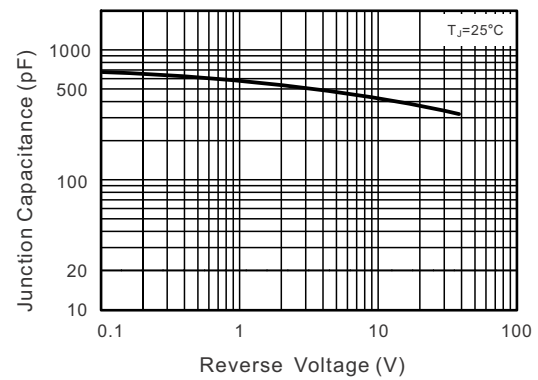


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

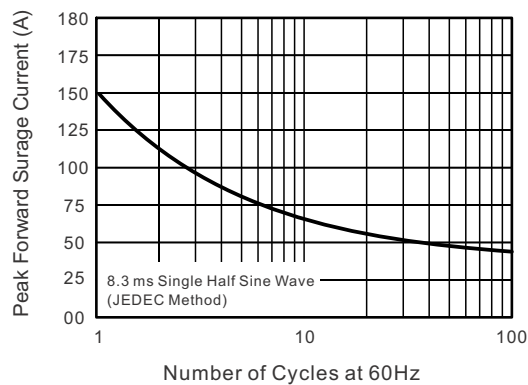
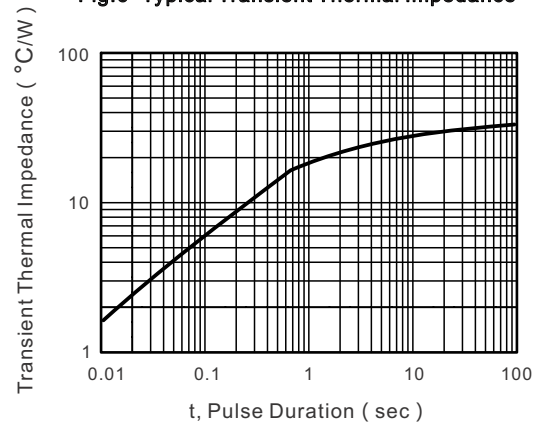
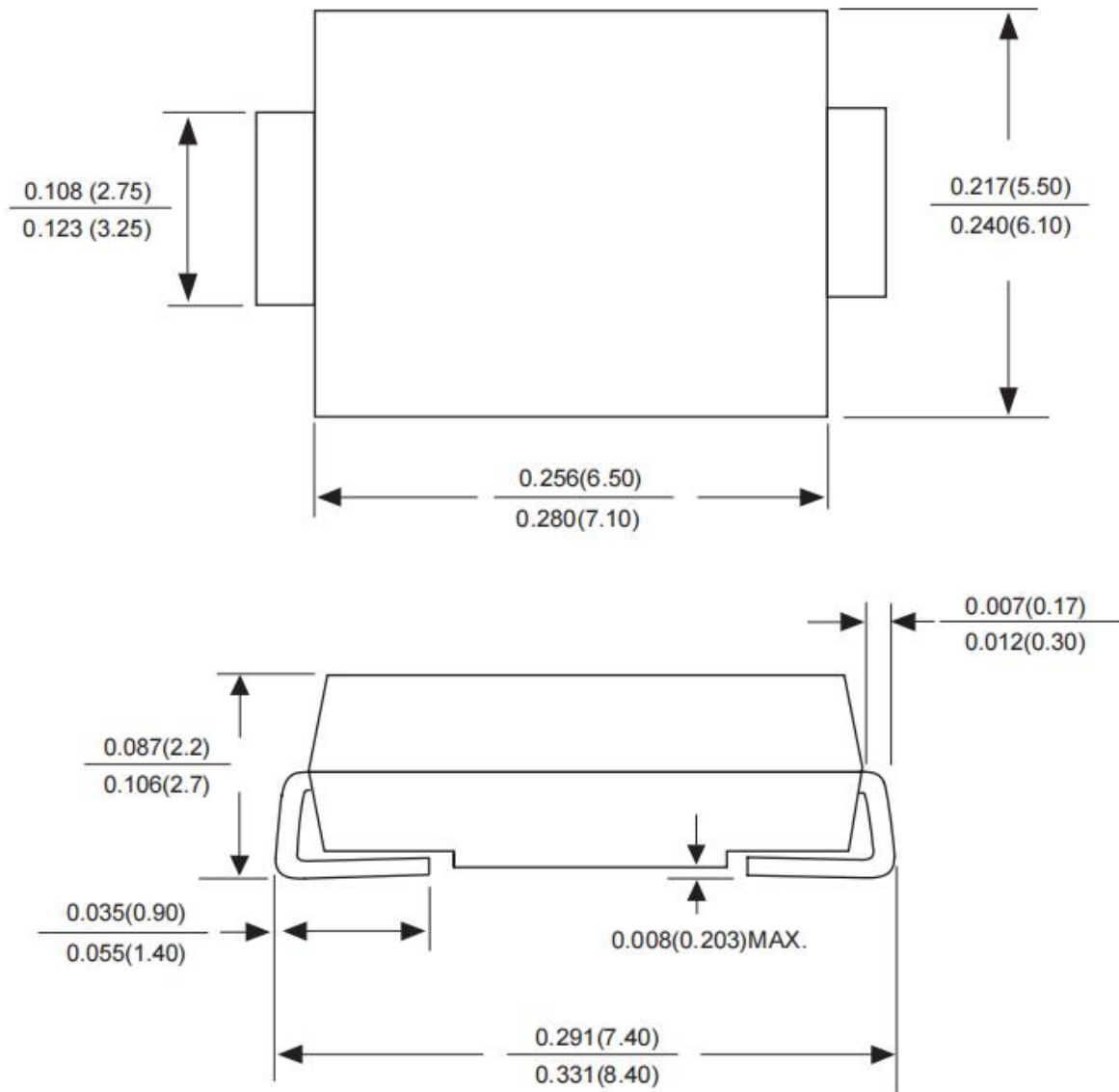


Fig.6- Typical Transient Thermal Impedance





Package Outline Dimensions SMC



Dimensions in inches and (millimeters)



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