

# S1P40R120SSE-A (Preliminary)

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## 1200V SiC Power MOSFET Module

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### 1 Maximum ratings

Table 2 Maximum rating ( $T_c = 25^\circ\text{C}$  unless other

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**1200V SiC Power MOSFET Module**

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## 2 Thermal / Packaging Characteristics

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\* By estimated

### 3.3 Switching characteristics

**Table 6** Dynamic characteristics( $T_c = 25^\circ\text{C}$  unless otherwise specified)

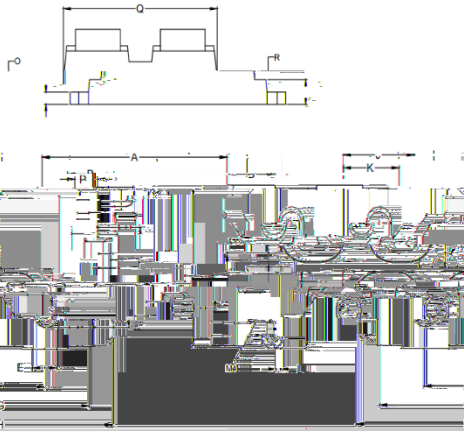
Symbol	Parameter	Min.	Typ.	Max.	Unit	Test Conditions	Note
$E_{on}$	Turn on switching energy	-	259	-		$V_{DS} = 800\text{V}$ , $V_{GS} = -4/+15\text{V}$ $I_D = 33.3\text{A}$ , $R_g = 2.5$ , $L = 120$ H	
$E_{off}$	Turn off switching energy	-	50	-			
$t_{d\ on}$	Turn on delay time	-	31	-			
$t_r$	Rise time	-	18	-			
$t_{d\ off}$	Turn off delay time	-	32	-	ns		

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### 4 Package drawing



DiM	Min	Millimeter	Max	A
10	31.40	31.60		
20	4.40			4.
30	4.40			4.
40	4.40			4.
50	4.40			4.
60	4.40			4.
70	4.40			4.
80	4.40			4.
90	4.40			4.
100	4.40			4.
110	4.40			4.
120	4.40			4.
130	4.40			4.
140	4.40			4.
150	4.40			4.
160	4.40			4.
170	4.40			4.
180	4.40			4.
190	4.40			4.
200	4.40			4.



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### Revision history

Document version	Date of release	Description of changes
V01_00	202.93 673.66 30	

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7. Except as otherwise explicitly approved by Sichain in a written document signed by authorized representatives of Sichain, Sichain' products may not be used in any applications where a failure of the product or any consequences of the use thereof can reasonably be expected to result in personal injury.

8. For use of our products in applications requiring a high degree of reliability (as exemplified below), please contact and consult with a Sichain representatives, for example but not limited to: transportation equipment, primary communication equipment, traffic lights, fire/crime prevention, safety equipment, medical systems, and power transmission systems.