

## 1. Part information

Part Number:	<b>B340T-02</b>	Issue date:	<b>2/9/01</b>
Description:	Special P <sub>D</sub> , R <sub>θJL</sub> , R <sub>θJA</sub> , Mechanical Dimensions	Series No.:	<b>1254</b>
Outline:	SMC	Cust. code.:	<b>P746A</b>
Marking:	B340+Cathode Band+DII Logo+Date Code	Cust. dwg#:	371S0020
Package:	Tape/Reel	Rev. Level:	<b>B</b>

## 2. Electrical characteristics

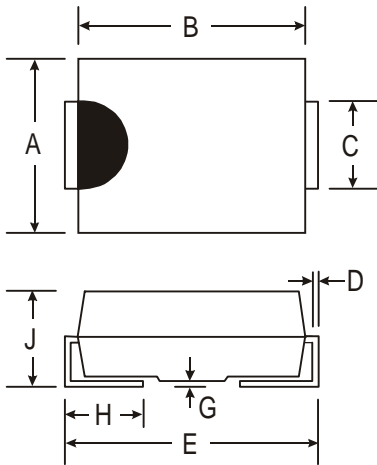
Specifications at 25°C ambient temperature unless otherwise specified.

Parameter		Test Condition	Max.	Units
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>		40	V
Working Peak Reverse Voltage	V <sub>RWM</sub>		40	V
Maximum DC Blocking Voltage	V <sub>R</sub>		40	V
Maximum Average Rectified Output Current (Note2)	I <sub>o</sub>	@ T <sub>T</sub> =110 °C	3.0	A
Peak Forward Surge Current	I <sub>FSM</sub>	8.3ms single ½ sine- wave superimposed on rated load (JEDEC Method)	100	A
Instantaneous Forward Voltage	V <sub>F</sub>	@ I <sub>F</sub> = 3.0A	0.50	V
DC Reverse Current @ Rated DC Blocking Voltage	I <sub>R</sub>	@T <sub>A</sub> =25 °C	0.5	mA
		@T <sub>A</sub> =100 °C	20	mA
Maximum Power Dissipation	P <sub>D</sub>		1.00	W
Typical Thermal Resistance (Note 1)	R <sub>θJA</sub>		100	°C/W
Typical Thermal Resistance (Note 1)	R <sub>θJL</sub>		14	°C/W
Typical Junction Capacitance	C <sub>J</sub>	1.0 MHz and V <sub>R</sub> =4.0V DC	300	pF
Storage and Operating Temperature Range	T <sub>STG</sub>		-65 to +150	°C
	T <sub>J</sub>			

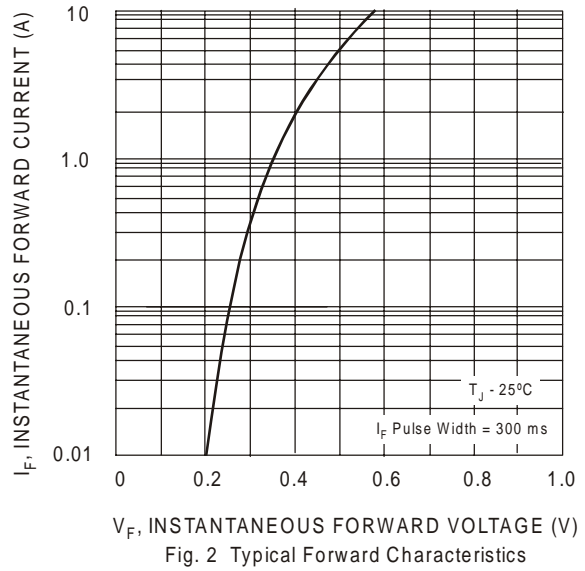
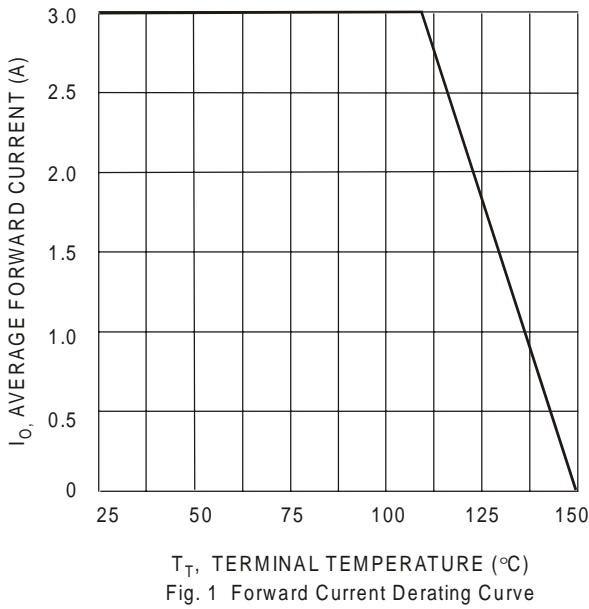
Note 1: Unit mounted on PC board with 5.0mm<sup>2</sup> (0.013 mm thick) copper pads has heat sink.

Note 2: For a capacitive load, derate current by 20%.

### 3. Mechanical outline



SMC		
Dim	Min	Max
A	5.59	6.10
B	6.60	7.11
C	2.92	3.07
D	0.15	0.30
E	7.75	8.13
G	0.10	0.20
H	0.76	1.27
J	1.90	2.41
All dimensions in mm		



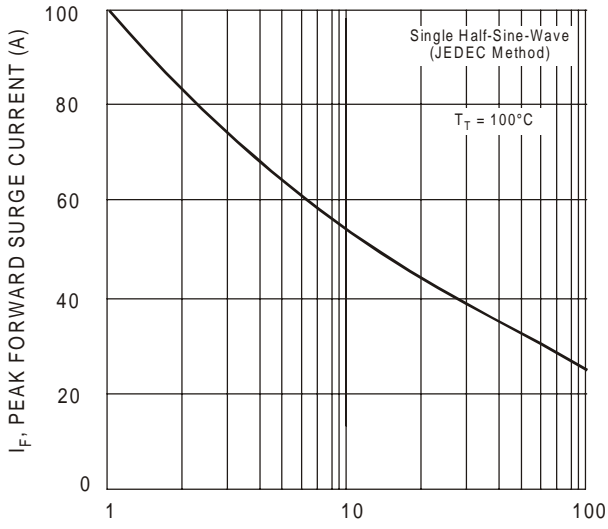


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

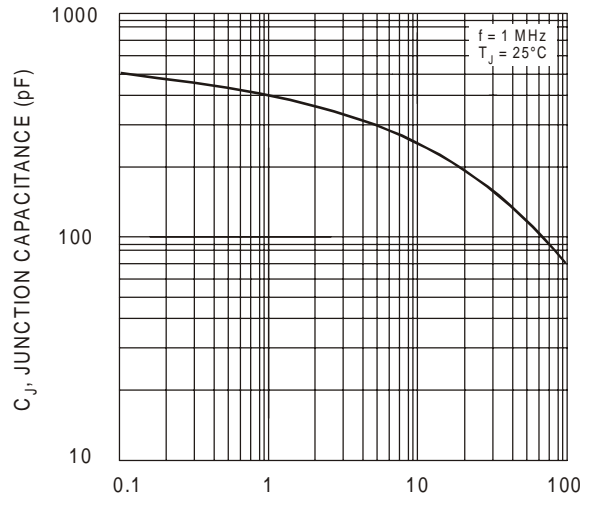


Fig. 4 Typical Junction Capacitance

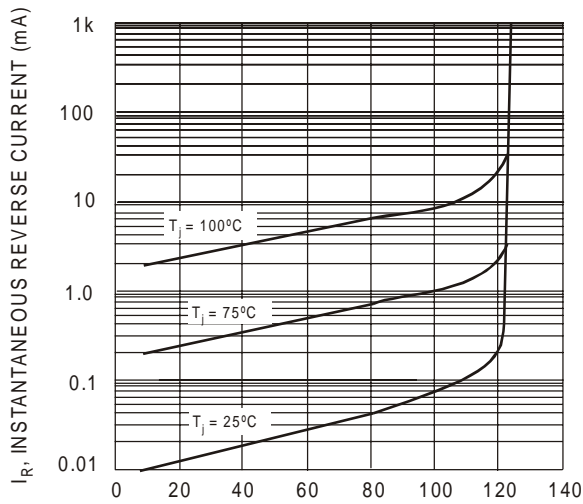


Fig. 5 Typical Reverse Characteristics

