

### Features

- Silicon Carbide Schottky Barrier Diode
- Small die size
- Low IR
- High-Recovery Speed

### Applications

- Switch mode power supplies
- Power Factor Correction
- Secondary Side Rectification
- PV Power Conditioners

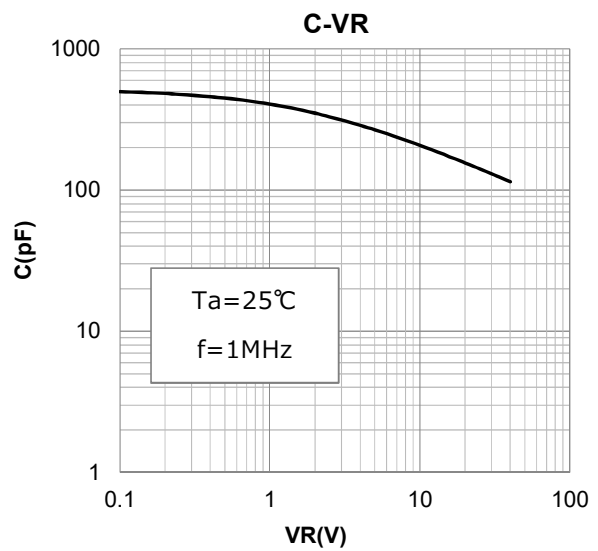
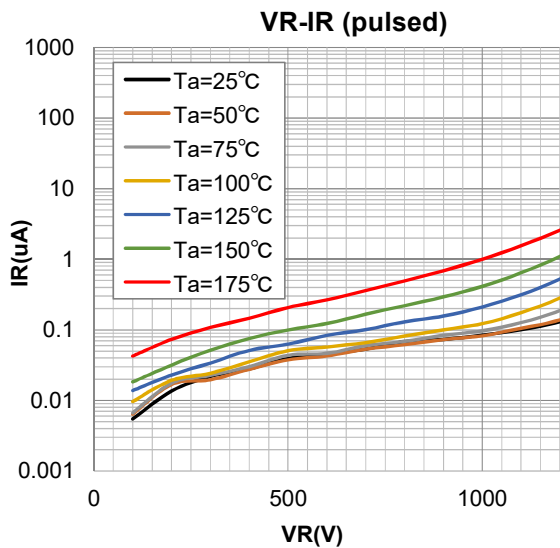
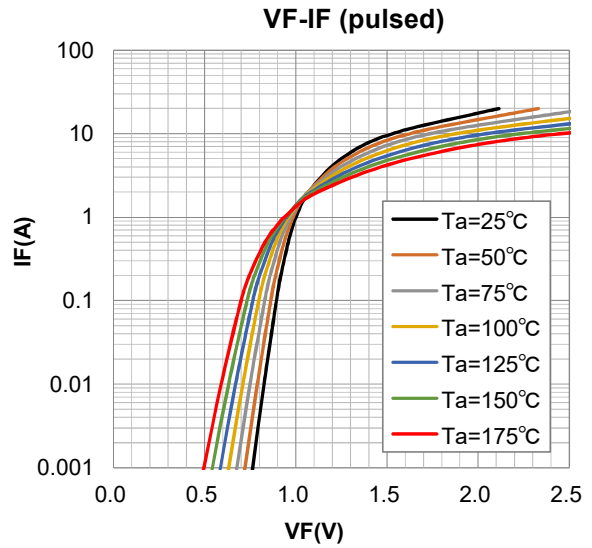
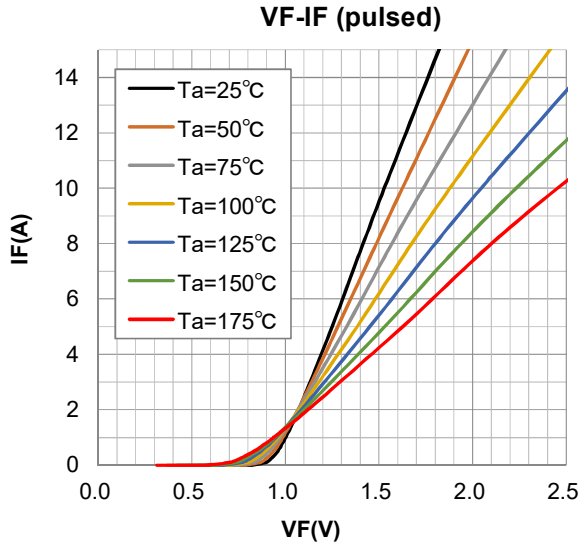
### Maximim Ratings (Ta=25°C)

Parameter	Symbol	Conditions	Limit	Unit
Repetitive peak reverse voltage	V <sub>RM</sub>		1200	V
Reverse voltage (DC)	V <sub>R</sub>		1200	V
Forward current (DC)	I <sub>F</sub>		10	A
Surge no repetitive forward current	I <sub>FSM</sub>	10ms Sinusoidal	40	A
Junction temperature	T <sub>j</sub>		175	°C
Storage temperature	T <sub>stg</sub>		-55 to +175	°C

### Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
DC blocking voltage	V <sub>DC</sub>	I <sub>R</sub> =0.2mA	1200	-	-	V
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =10A, Ta=25°C	-	1.53	1.88	V
		I <sub>F</sub> =10A, Ta=150°C	-	2.23	-	V
		I <sub>F</sub> =10A, Ta=175°C	-	2.45	-	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =1200V, Ta=25°C	-	0.1	200	uA
		V <sub>R</sub> =1200V, Ta=150°C	-	1.1	-	uA
		V <sub>R</sub> =1200V, Ta=175°C	-	2.6	-	uA
Junction capacitance	C	V <sub>R</sub> =1V, f=1MHz	-	405	-	pF
Total capacitive charge	Q <sub>C</sub>	V <sub>R</sub> =800V, di/dt=500A/us	-	34	-	nC
Switching time	t <sub>c</sub>	V <sub>R</sub> =800V, di/dt=500A/us	-	15	-	ns

### Electrical Characteristics curves



### NOTE

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- 1 ) This document is for reference only.
- 2 ) Please request for the specification sheet before use.
- 3 ) Since the products are in wafer form, the values in this document are for reference only.
- 4 ) Although we strive to improve the quality of our products, they may malfunction or fail. When using this product, please implement a safety design suitable for the system within your responsibility.
- 5 ) Although this document has been prepared with great care, we assume no responsibility for any damages incurred due to errors in the provided information.
- 6 ) If the operating environment (e.g., high temperature, high voltage, high current) is severe, the reverse current may become excessively large and the device may be destroyed due to the
- 7 ) The absolute maximum ratings must not be exceeded even momentarily. Do not exceed the absolute maximum ratings for any of the multiple ratings.
- 8 ) In particular, when evaluating or using the product in a resin-encapsulated package or in a sealed environment, be sure to measure the temperature and confirm that the maximum junction temperature designated as the maximum ratings is not exceeded.
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