

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

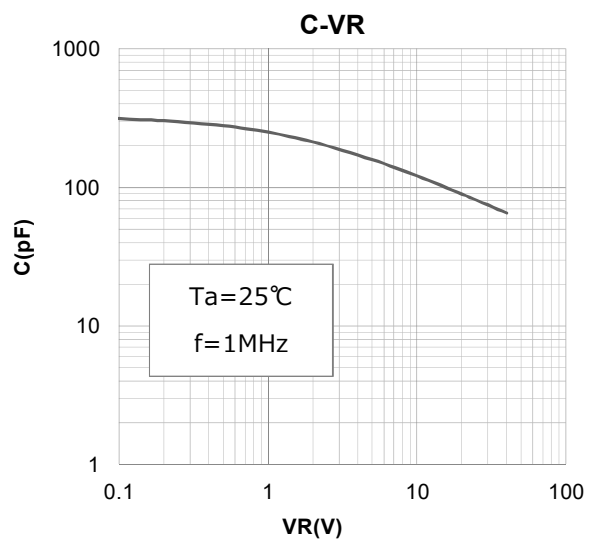
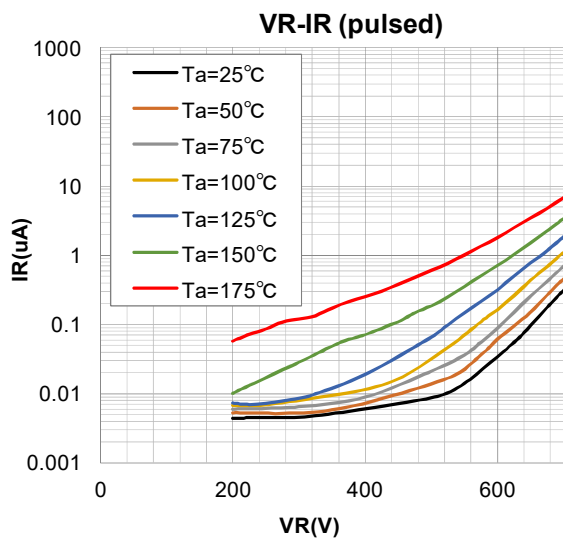
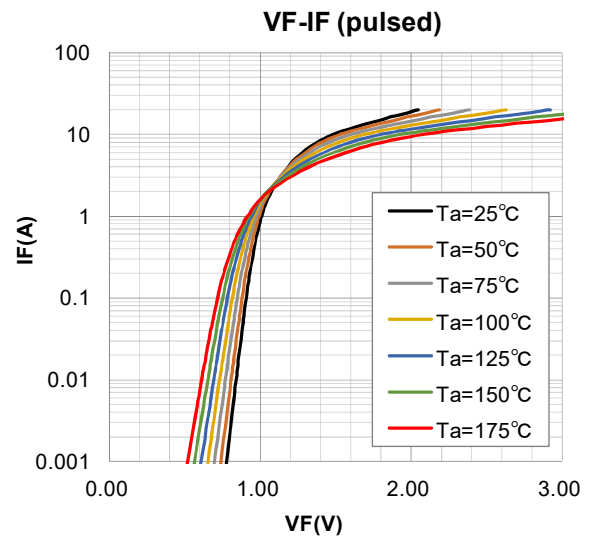
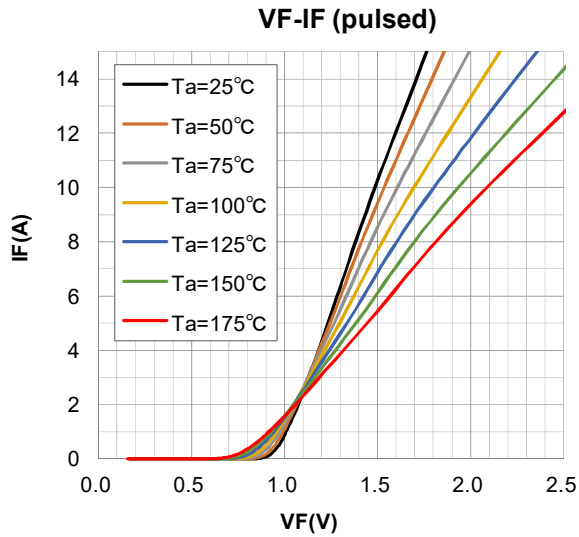
Maximim Ratings (Ta=25°C)

Parameter	Symbol	Conditions	Limit	Unit
Repetitive peak reverse voltage	V _{RM}		650	V
Reverse voltage (DC)	V _R		650	V
Forward current (DC)	I _F		10	A
Surge no repetitive forward current	I _{FSM}	10ms Sinusoidal	60	A
Junction temperature	T _J		175	°C
Storage temperature	T _{stg}		-55 to +175	°C

Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
DC blocking voltage	V _{DC}	I _R =50uA	650	-	-	V
Forward voltage	V _F	I _F =10A, Ta=25°C	-	1.49	1.91	V
		I _F =10A, Ta=150°C	-	1.93	-	V
		I _F =10A, Ta=175°C	-	2.09	-	V
Reverse current	I _R	V _R =650V, Ta=25°C	-	0.1	50	uA
		V _R =650V, Ta=150°C	-	1.5	-	uA
		V _R =650V, Ta=175°C	-	3.5	-	uA
Total capacitance	C	V _R =1V, f=1MHz	-	250	-	pF
Total capacitive charge	Q _C	V _R =400V, di/dt=350A/us	-	24	-	nC
Switching time	t _c	V _R =400V, di/dt=350A/us	-	15	-	nS

Electrical Characteristics curves



NOTE

- 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 increased reverse current.
- 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.
- 9) The products described in this document are intended for use in general electronic equipment (e.g., AV equipment, OA equipment, home appliances).
- 10) This product is not intended for use in products whose manufacture, use, or sale is prohibited by domestic or foreign laws or regulations.
- 11) Do not use the information contained in this document or this product for the purpose of developing destructive weapons for military use.
- 12) When exporting this product, please comply with applicable export laws and regulations and follow the necessary procedures.
- 13) The information in this document is subject to change without notice.
- 14) The process flow and process conditions of this product are subject to change without notice.