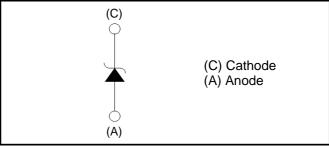


V <sub>R</sub>	1200V		
١ <sub>F</sub>	5A* <sup>1</sup>		
Q <sub>C</sub>	17nC		

## Features

- 1) Shorter recovery time
- 2) Reduced temperature dependence
- 3) High-speed switching possible

### ●Inner circuit



### Construction

Silicon carbide epitaxial planer type

Schottky diode

### •Absolute maximum ratings (Tj = 25°C)

Parameter	Symbol	Value	Unit
Reverse voltage (repetitive peak)	V <sub>RM</sub>	1200	V
Reverse voltage (DC)	V <sub>R</sub>	1200	V
Continuous forward current	I <sub>F</sub>	5* <sup>1</sup>	А
	I <sub>FSM</sub>	23* <sup>2</sup>	А
Surge no repetitive forward current		87* <sup>3</sup>	А
		18* <sup>4</sup>	А
Repetitive peak forward current	I <sub>FRM</sub>	25* <sup>5</sup>	А
Junction temperature	Tj	175	°C
Range of storage temperature	Tstg	-55 to +175	°C

\*1 Limited by Tj \*2 PW=8.3ms sinusoidal, Tj=25°C \*3 PW=10µs square, Tj=25°C

\*4 PW=8.3ms sinusoidal, Tj=150°C \*5 Duty cycle=10%, limited by Tj

•Electrical characteristics (Tj = 25°C)

Parameter	Symbol	Conditions	Values			l loit
		Conditions	Min.	Тур.	Max.	Unit
DC blocking voltage	V <sub>DC</sub>	I <sub>R</sub> =0.1mA	1200	-	-	V
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =5A,Tj=25°C	-	1.4	1.6	V
		I <sub>F</sub> =5A,Tj=150°C	-	1.8	-	V
		I <sub>F</sub> =5A,Tj=175°C	-	1.9	-	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =1200V,Tj=25°C	-	5	100	μA
		V <sub>R</sub> =1200V,Tj=150°C	-	40	-	μA
		V <sub>R</sub> =1200V,Tj=175°C	-	65	-	μA
Total capacitance	С	V <sub>R</sub> =1V,f=1MHz	-	270	-	pF
		V <sub>R</sub> =800V,f=1MHz	-	21	-	pF
Total capacitive charge	Qc	V <sub>R</sub> =800V,di/dt=500A/μs	-	17	-	nC
Switching time	tc	V <sub>R</sub> =800V,di/dt=500A/μs	-	15	-	ns

Forward Current : I<sub>F</sub> [A]

#### •Electrical characteristic curves

Fig.1  $V_F$  -  $I_F$  Characteristics

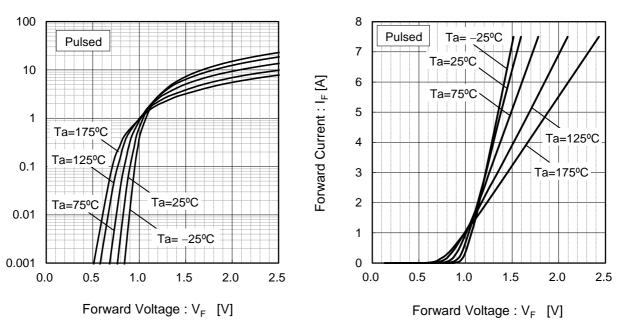
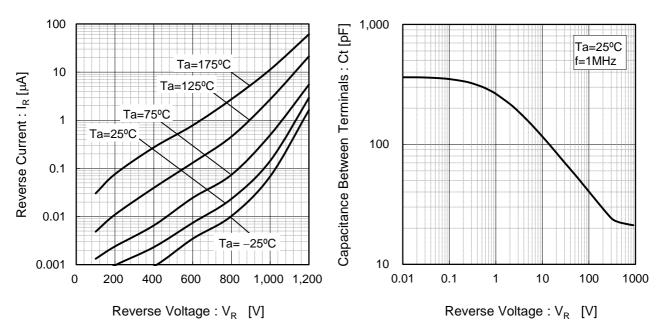


Fig.2 V<sub>F</sub> - I<sub>F</sub> Characteristics

## Fig.3 $V_R$ - $I_R$ Characteristics

Fig.4 V<sub>R</sub>-Ct Characteristics



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