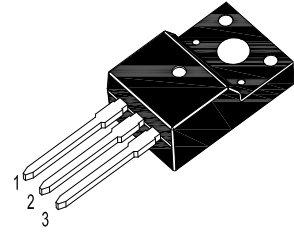
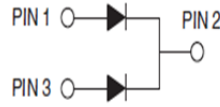


SFF1001CT THRU SFF1008CT-HAF

Glass Passivated Super Fast Rectifiers
Reverse Voltage - 50 to 600 V
Forward Current - 10 A

Features

- Low power loss
- High efficiency
- Low forward voltage
- High current capability
- High surge capacity
- Halogen and Antimony Free(HAF), RoHS compliant



TO-220F Plastic Package
 1. Anode 2. Cathode 3. Anode

Maximum Ratings and Characteristics

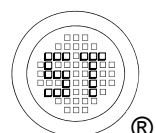
Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	SFF 1001CT	SFF 1002CT	SFF 1003CT	SFF 1004CT	SFF 1005CT	SFF 1006CT	SFF 1007CT	SFF 1008CT	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	500	600	V
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	350	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	500	600	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	10								A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load(JEDEC method)	I_{FSM}	125								A
Maximum Forward Voltage ¹⁾ at $I_F = 5 A$	V_F	0.975			1.3		1.7			V
Maximum DC Reverse Current at $T_j = 25^\circ C$ at Rated DC Blocking Voltage at $T_j = 125^\circ C$	I_R	10				400				μA
Maximum Reverse Recovery Time ²⁾	T_{rr}	35								ns
Maximum Junction Capacitance ³⁾	C_j	70			50					pF
Typical Thermal Resistance, Junction to Case	$R_{\theta JC}$	5.5								$^\circ C/W$
Operating Junction Temperature	T_j	175								$^\circ C$
Storage Temperature Range	T_{stg}	- 55 to + 175								$^\circ C$

¹⁾ Pulse Test with PW=300 usec, 1% Duty Cycle.

²⁾ Reverse Recovery Test Conditions: $I_F=0.5 A$, $I_R=1.0 A$, $I_{RR}=0.25 A$.

³⁾ Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.



SFF1001CT THRU SFF1008CT-HAF

Electrical Characteristic Curves

Fig 1. Forward Current Derating Curve

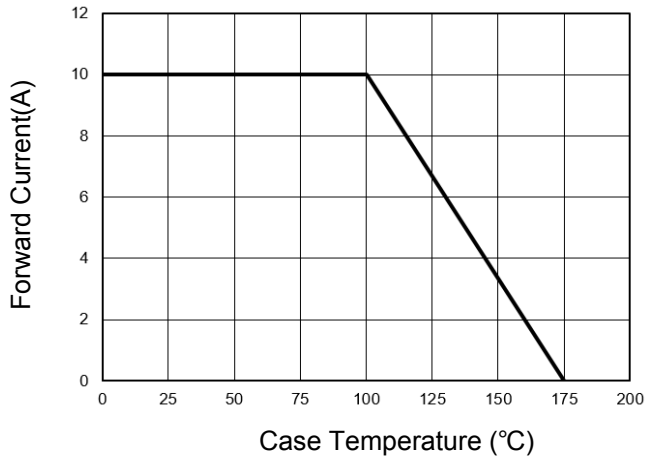


Fig 2. Forward Characteristics Curve

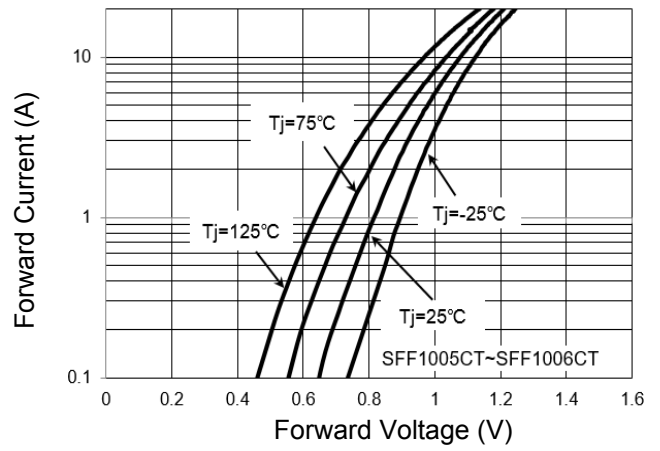


Fig 3. Reverse Characteristics Curve

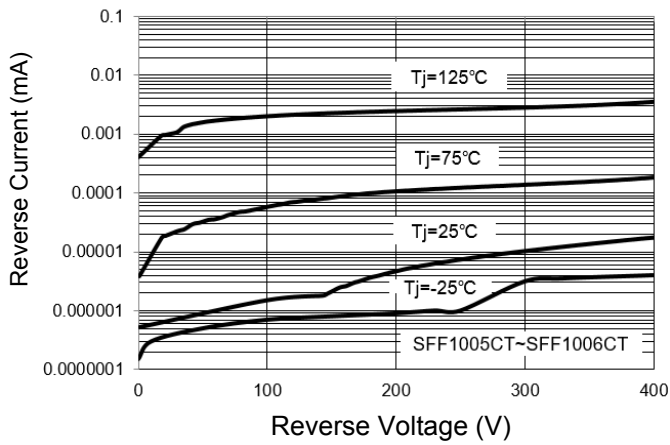


Fig 4. Junction Capacitance

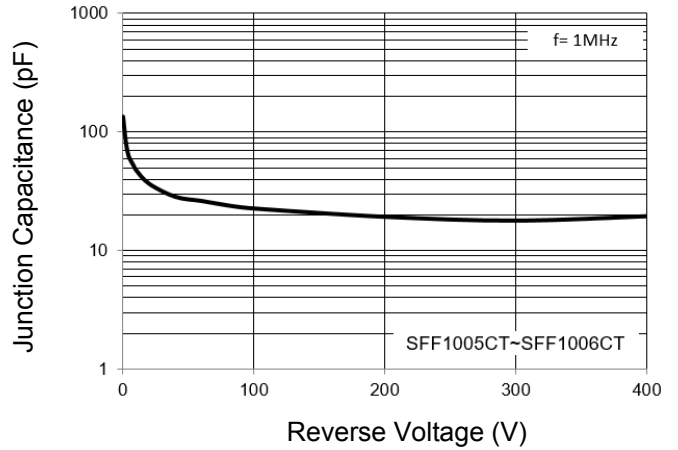
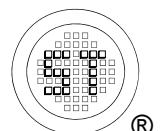
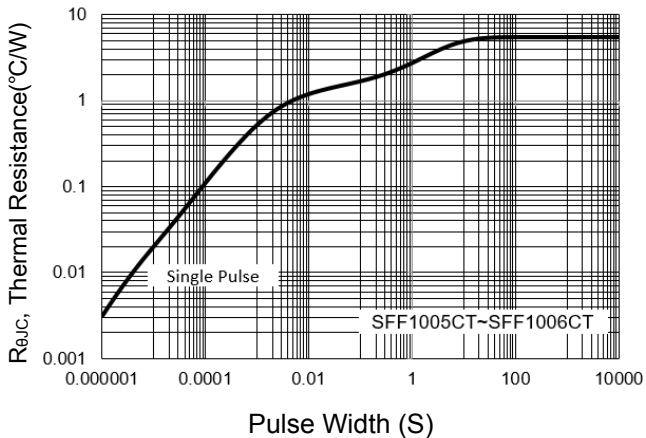


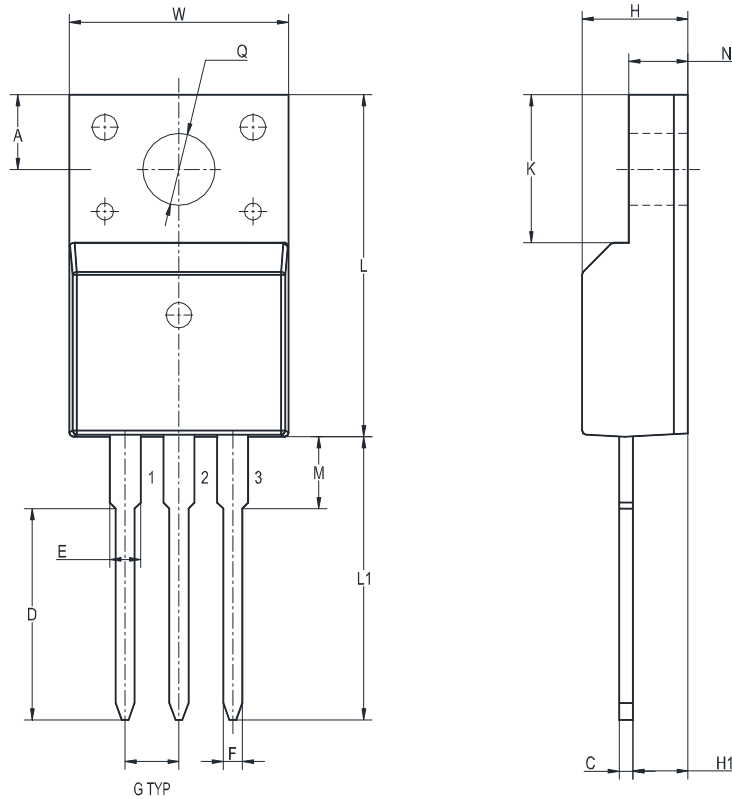
Fig 5 Thermal Resistance Curve



SFF1001CT THRU SFF1008CT-HAF

Package Outline Dimensions (Units: mm)

TO-220F



UNIT	A	C	D	E	F	G	W	H	H1	Q	L	L1	M	K	N
mm	3.5	0.7	10.3	1.5	0.9	2.54	10.5	4.9	2.9	3.4	16	13.5	3.5	6.7	2.8
	2.8	0.4	9.7	1.1	0.7	TYP.	9.5	4.5	2.5	2.9	15	12.5	2.9	6.2	2.3

Marking information

" SFF100*CT " = Part No.

Type	Marking	Type	Marking
SFF1001CT	SFF1001CT	SFF1005CT	SFF1005CT
SFF1002CT	SFF1002CT	SFF1006CT	SFF1006CT
SFF1003CT	SFF1003CT	SFF1007CT	SFF1007CT
SFF1004CT	SFF1004CT	SFF1008CT	SFF1008CT

" ***** " = Date Code Marking

Font type: Arial

