

CONTROLLED AVALANCHE RECTIFIER

TOSHIBA (DISCRETE/OPTO)

39 DE 9097250 0002249 1

Unit in mm

25QF11 1200V 25A

MAXIMUM RATINGS

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	25LF11	800	V
	25NF11	1000	
	25QF11	1200	
Peak Reverse Power Dissipation ($t_w=10\mu s$ $T_a=25^\circ C$)	P_{RSM}	12	kW
Average Forward Current ($T_c=135^\circ C$)	$I_{F(AV)}$	25	A
Peak One Cycle Surge Forward Current (Non-Repetitive)	I_{FSM}	500(50Hz)	A
Junction Temperature	T_j	-40~175	$^\circ C$
Storage Temperature Range	T_{stg}	-40~175	$^\circ C$
Stud Torque		30	kgcm

ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	CONDITION	MIN.	MAX.	UNIT
Avalanche Break Breakdown Voltage	25LF11	$I_{RRM}=5mA$, $T_a=25^\circ C$	1000	1300	V
	25NF11		1250	1550	
	25QF11		1500	1900	
Peak Forward Voltage	V_{FM}	$I_{FM}=100A$, $T_a=25^\circ C$	—	1.38	V
Repetitive Peak Reverse Current	25LF11	$T_j=175^\circ C$ $V_{RRM}=\text{Rated}$	—	3.0	mA
	25NF11		—	2.5	
	25QF11		—	2.0	
Thermal Resistance (Note 1)	$R_{th(j-c)}$	DC	—	1.0	$^\circ C/W$

Notes: 1. Junction to Case.

2. At the series operation parallel capacitors(0.01 μF) to the device are recommended to attach.

3. Consider the heat radiation including reverse power dissipation.

25FXF12 3000V 25A

MAXIMUM RATINGS

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	3000	V
Peak Reverse Power Dissipation ($t_w=10\mu s$ $T_a=25^\circ C$)	R_{RSM}	8	kW
Average Forward Current ($T_c=140^\circ C$)	$I_{F(AV)}$	25	A
Peak One Cycle Surge Forward Current (Non-Repetitive)	I_{FSM}	500(50Hz)	A
Junction Temperature	T_j	-40~175	$^\circ C$
Storage Temperature Range	T_{stg}	-40~175	$^\circ C$
Stud Torque		50	kgcm

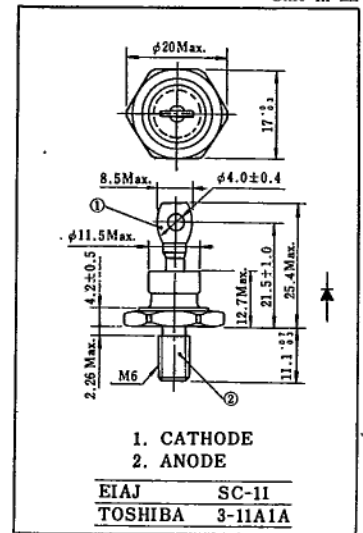
電氣的特性

CHARACTERISTIC	SYMBOL	CONDITION	MIN.	MAX.	UNIT
Avalanche Break Breakdown Voltage	V_Z	$I_{RRM}=5mA$, $T_a=25^\circ C$	3300	4200	V
Peak Forward Voltage	V_{FM}	$I_{FM}=80A$, $T_a=25^\circ C$	—	1.70	V
Repetitive Peak Reverse Current	I_{RRM}	$V_{RRM}=\text{Rated}$, $T_j=175^\circ C$	—	7.0	mA
Thermal Resistance (Note 1)	$R_{th(j-c)}$	DC	—	0.55	$^\circ C/W$

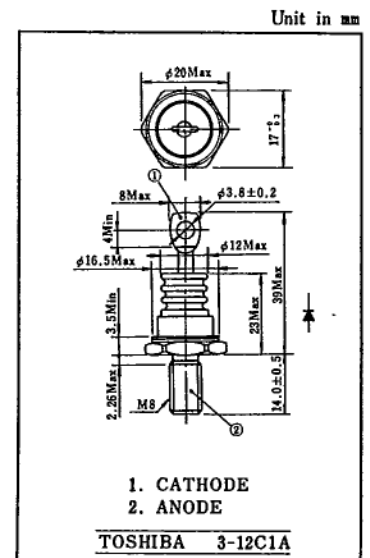
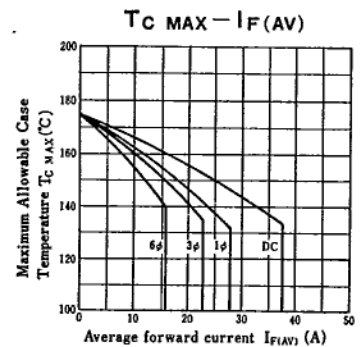
Notes: 1. Junction to Case.

2. At the series operation parallel capacitors(0.01 μF) to the device are recommended to attach.

3. Consider the heat radiation including reverse power dissipation.



AC32 is furnished as an accessory.



AC56 is furnished as an accessory.

