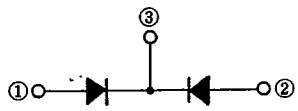
RECTIFIER STACK (SCHOTTKY BARRIER DIODE STACK)

30GWJ2C11 40V 30A

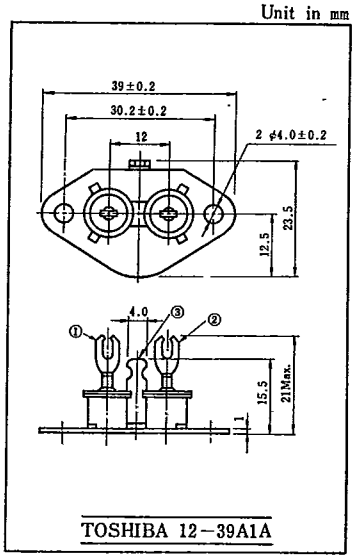
MAXIMUM RATINGS

CHARACTERISTIC		SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	30FWJ2C11	V_{RRM}	30	V
	30GWJ2C11		40	
Average Output Rectified Current (Fig. 1)		I_o	30	A
Peak One Cycle surge current (Non-Repetitive)		I_{FSM}	400 (50Hz)	A
Junction Temperature		T_j	−40~150	℃
Storage Temperature Range		T_{stg}	−40~150	℃

POLARITY



Unit in mm



ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage	V_{FM}	I_{FM}=15A, Ta=25℃	−	−	0.68	V
Repetitive Peak Reverse Current	I_{RRM}	V_{RM}=Rated, T_j=150℃	−	−	20	mA
Reverse Recovery Time	t_{rr}	I_{FM}=15A, Ta=25℃ di/dt=30A/μs	−	−	200	ns
Junction Capacitance	C_j	V_R=10V, f=100KHz	−	0.5	−	nF

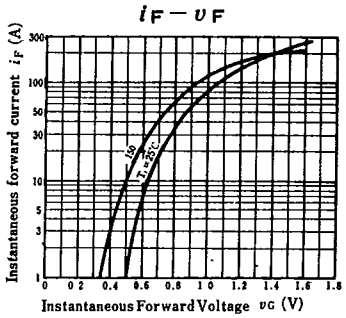
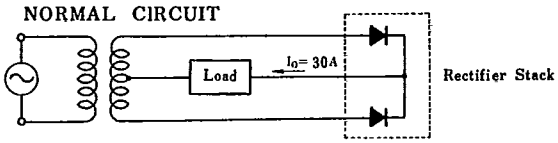


Fig. 1 Circuit For Average Output Rectified current.

NORMAL CIRCUIT

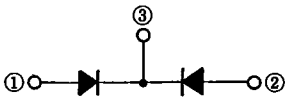


30GWJ2C12 40V 30A

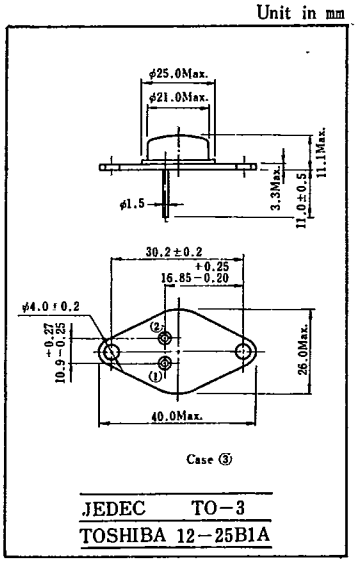
MAXIMUM RATINGS

CHARACTERISTIC		SYMBOL	RATING	UNIT
Repetitive Peak Reverse Current	30FWJ2C12	V_{RRM}	30	V
	30GWJ2C12		40	
Average Output Rectified Current (Tc=131℃)		I_o	30	A
Peak One Cycle Surge Forward Current (Non-Repetitive)		I_{FSM}	400(50Hz)	A
Junction Temperature		T_j	−40~150	℃
Storage Temperature Range		T_{stg}	−40~150	℃

POLARITY



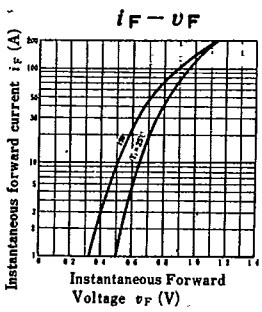
Unit in mm



ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage	V_{FM}	I_{FM}=15A, Ta=25℃	−	−	0.68	V
Repetitive Peak Reverse Current	I_{RRM}	V_{RRM}=Rated, T_j=150℃	−	−	20	mA
Reverse Recovery Time	t_{rr}	I_{FM}=15A, Ta=25℃ di/dt=30A/μs	−	−	200	ns
Junction Capacitance	C_j	V_R=10V, f=100KHz	−	0.5	−	nF
Thermal Resistance	$R_{th(j-c)}$	DC, Junction to Case	−	−	1.0	℃/W

Notes : 1. To mount the rectifier stack on the heat sink, coat the contact surface with grease in advance.



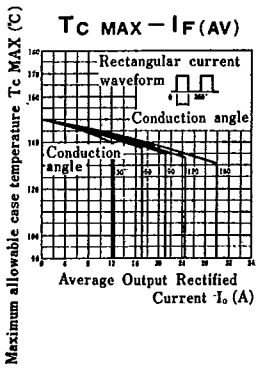
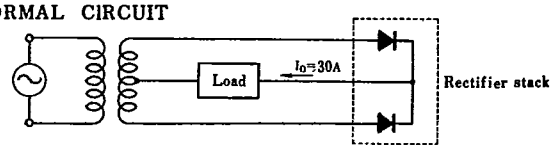



Fig. 1 NORMAL CIRCUIT