



5GWJ2CZ47C

SWITCHING MODE POWER SUPPLY APPLICATION CONVERTER & CHOPPER APPLICATION

- Repetitive Peak Reverse Voltage : $V_{RRM} = 40\text{ V}$
- Average Output Rectified Current : $I_O = 5\text{ A}$
- Low Switching Losses and Output Noise

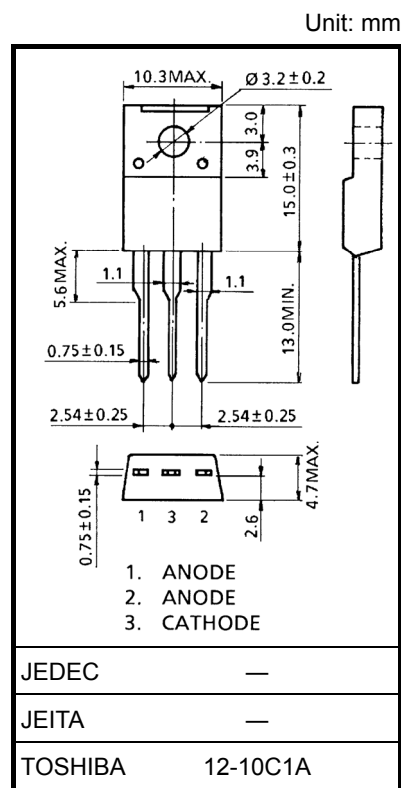
ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Repetitive Peak Reverse Surge Voltage (Note 2)	V_{RRSM}	48	V
Average Output Rectified Current	I_O	5	A
Peak One Cycle Surge Forward Current (Sin Wave)	I_{FSM}	50 (50Hz) 55 (60Hz)	A
Junction Temperature	T_j	-40~125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-40~150	$^\circ\text{C}$
Screw Torque	—	0.6	N·m

Note 1: Pulse Width (t_w) $\leq 500\text{ns}$, duty (t_w / T) $\leq 1 / 25$

Note 2: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the absolute maximum ratings.

Please design the appropriate reliability upon reviewing the Toshiba Semiconductor Reliability Handbook ("Handling Precautions"/Derating Concept and Methods) and individual reliability data (i.e. reliability test report and estimated failure rate, etc.).



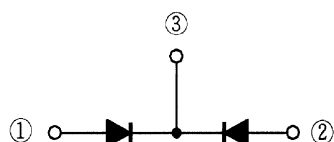
Weight: 2.0 g (typ.)

ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

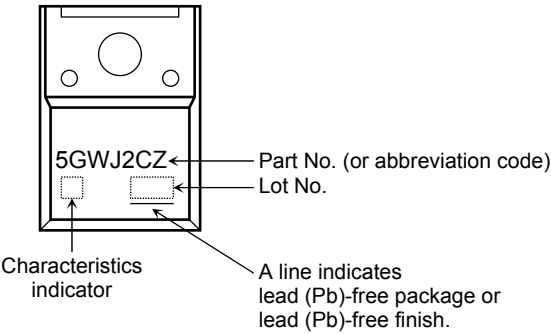
CHARACTERISTIC	SYMBOL	TEST CONDITION	TYP.	MAX	UNIT
Peak Forward Voltage (Note 3)	V_{FM}	$I_{FM} = 2.5\text{A}$	—	0.55	V
Repetitive Peak Reverse Current (Note 3)	I_{RRM}	$V_{RRM} = \text{Rated}$	—	3.5	mA
Junction Capacitance (Note 3)	C_j	$V_R = 10\text{V}$, $f = 1.0\text{MHz}$	100	—	pF
Thermal Resistance	$R_{th(j-c)}$	Total DC, Junction to Case	—	3.5	$^\circ\text{C} / \text{W}$

Note 3: A value applied to one cell.

POLARITY



MARKING



Abbreviation Code	Part No.
5GWJ2CZ	5GWJ2CZ47C

