

TOSHIBA HIGH EFFICIENCY DIODE STACK (HED) SILICON EPITAXIAL TYPE

10DL2CZ47A, 10FL2CZ47A, 10GL2CZ47A

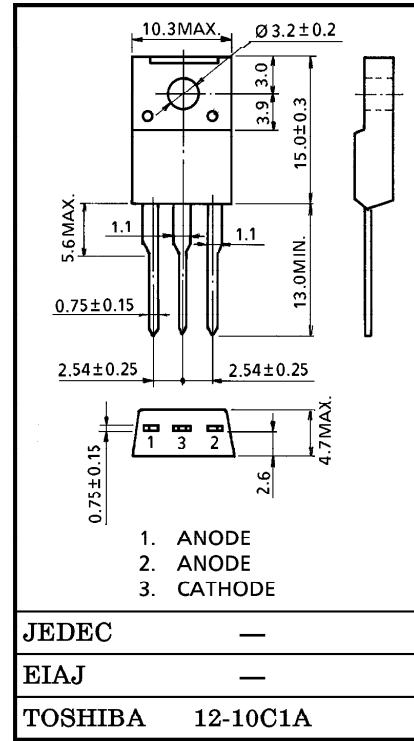
SWITCHING TYPE POWER SUPPLY APPLICATION
CONVERTER & CHOPPER APPLICATION

Unit in mm

- Repetitive Peak Reverse Voltage : $V_{RRM}=200, 300, 400V$
- Average Output Rectified Current : $I_O=10A$
- Ultra Fast Reverse-Recovery Time : $t_{rr}=35ns$ (Max.)
- Low Switching Losses and Output Noise.

MAXIMUM RATINGS

CHARACTERISTIC		SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	10DL2CZ47A	V_{RRM}	200	V
	10FL2CZ47A		300	
	10GL2CZ47A		400	
Average Output Rectified Current		I_O	10	A
Peak One Cycle Surge Forward Current (Sine Wave)		I_{FSM}	50 (50Hz)	A
			55 (60Hz)	
Junction Temperature		T_j	-40~150	°C
Storage Temperature Range		T_{stg}	-40~150	°C
Screw Torque		—	0.6	N·m



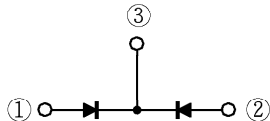
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

Weight : 2.0g

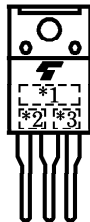
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage (Note 1)	10DL2CZ47A	V_{FM}	$I_{FM}=5A$	—	—	0.98	V
	10FL2CZ47A			—	—	1.3	
	10GL2CZ47A			—	—	1.8	
Repetitive Peak Reverse Current (Note 1)	10DL2CZ47A	I_{RRM}	$V_{RRM}=\text{Rated}$	—	—	10	μA
	10FL2CZ47A			—	—	10	
	10GL2CZ47A			—	—	50	
Reverse Recovery Time (Note 1)		t_{rr}	$I_F=2A, di/dt=-20A/\mu s$	—	—	35	ns
Forward Recovery Time (Note 1)		t_{fr}	$I_F=1A$	—	—	100	ns
Thermal Resistance		$R_{th(j-c)}$	DC Total, Junction to Case	—	—	3.6	°C/W

(Note 1) A value of one cell.

POLARITY



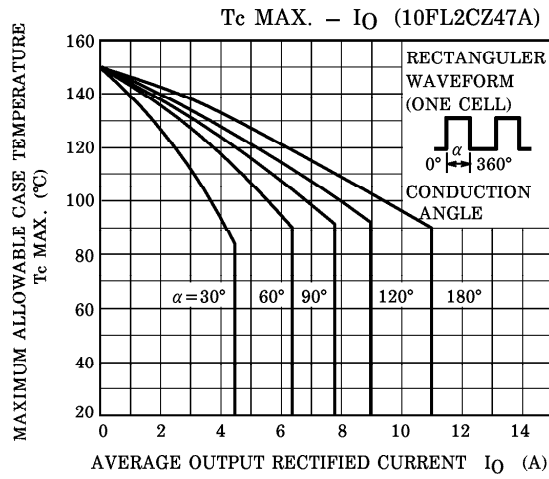
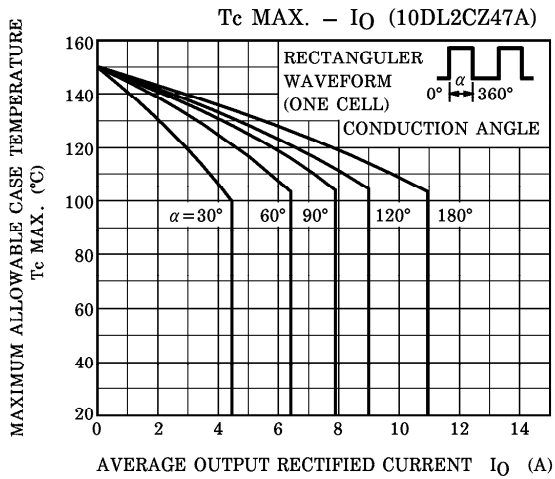
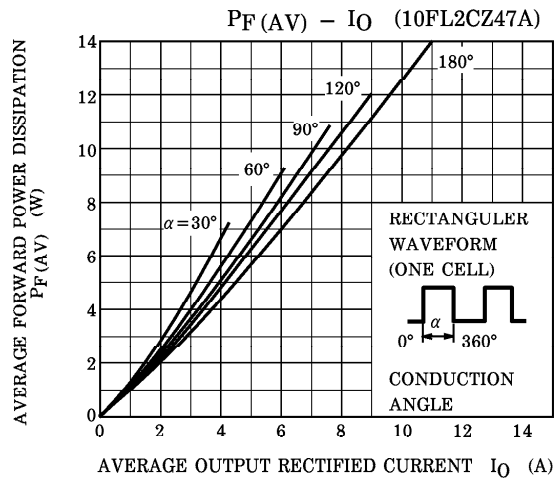
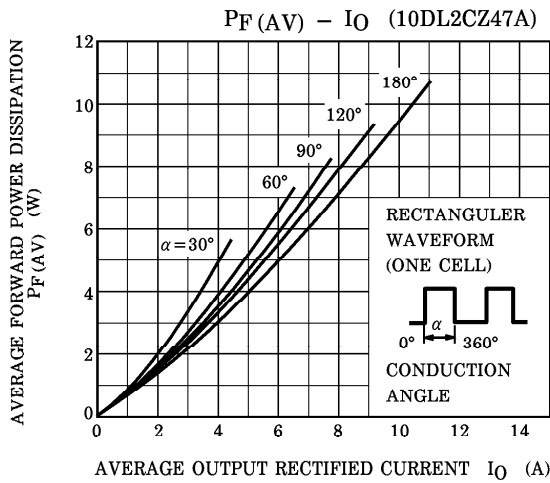
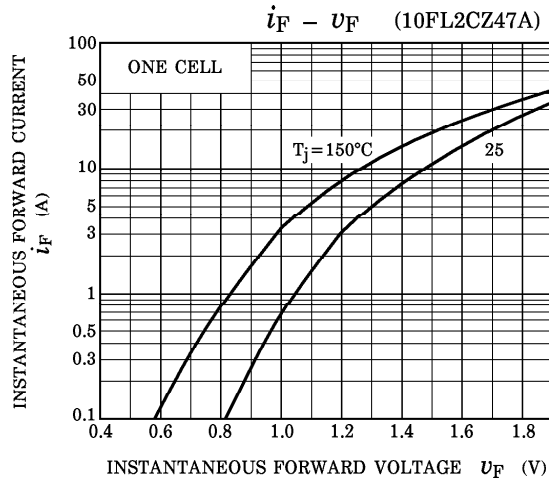
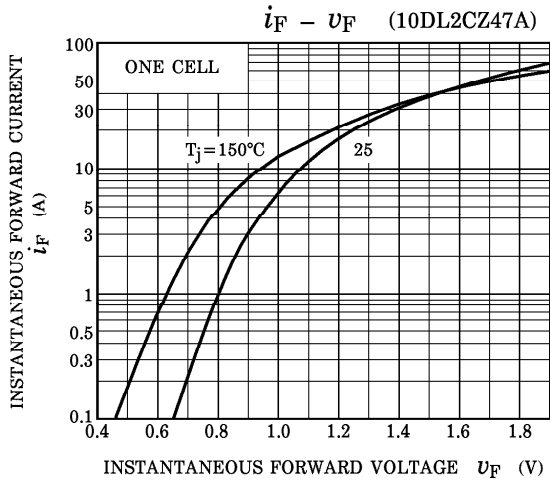
MARKING



*1	MARK	10DL2CZ	TYPE	10DL2CZ47A
		10FL2CZ		10FL2CZ47A
		10GL2CZ		10GL2CZ47A
*2	A			
*3	Lot Number			
	<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; width: 20px; height: 20px; margin-right: 5px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin-right: 5px;"></div> <div style="margin-right: 5px;">—</div> <div style="margin-right: 5px;">Month (Starting from Alphabet A)</div> <div style="margin-right: 5px;">—</div> <div style="margin-right: 5px;">Year (Last Number of the Christian Era)</div> </div>			

961001EAA2

● TOSHIBA is continually working to improve the quality and the reliability of its products. Nevertheless, semiconductor devices in general can malfunction or fail due to their inherent electrical sensitivity and vulnerability to physical stress. It is the responsibility of the buyer, when utilizing TOSHIBA products, to observe standards of safety, and to avoid situations in which a malfunction or failure of a TOSHIBA product could cause loss of human life, bodily injury or damage to property. In developing your designs, please ensure that TOSHIBA products are used within specified operating ranges as set forth in the most recent products specifications. Also, please keep in mind the precautions and conditions set forth in the TOSHIBA Semiconductor Reliability Handbook.



961001EAA2'

- The information contained herein is presented only as a guide for the applications of our products. No responsibility is assumed by TOSHIBA CORPORATION for any infringements of intellectual property or other rights of the third parties which may result from its use. No license is granted by implication or otherwise under any intellectual property or other rights of TOSHIBA CORPORATION or others.
- The information contained herein is subject to change without notice.

