

TOSHIBA

5DL2CZ47A, 5FL2CZ47A, 5GL2CZ47A

TOSHIBA HIGH EFFICIENCY DIODE STACK (HED) SILICON EPITAXIAL TYPE

5DL2CZ47A, 5FL2CZ47A, 5GL2CZ47A

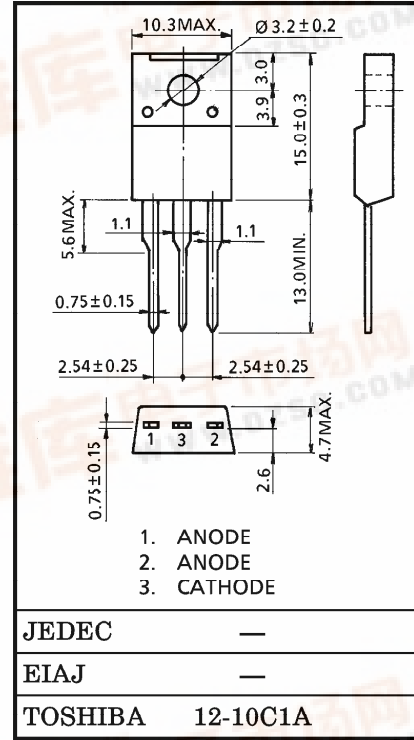
SWITCHING TYPE POWER SUPPLY APPLICATION
CONVERTER & CHOPPER APPLICATION

Unit in mm

- Repetitive Peak Reverse Voltage : $V_{RRM} = 200, 300, 400V$
- Average Output Rectified Current : $I_O = 5A$
- 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	5DL2CZ47A	V_{RRM}	200	V
	5FL2CZ47A		300	
	5GL2CZ47A		400	
Average Output Rectified Current		I_O	5	A
Peak One Cycle Surge Forward Current (Sin Wave)		I_{FSM}	25 (50Hz)	A
			27.5 (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)

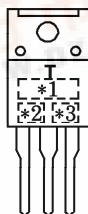
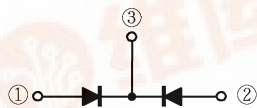
Weight : 2.0g

CHARACTERISTIC		SYMBOL	TEST CONDITION	TYP.	MAX.	UNIT
Peak Forward Voltage (Note 1)	5DL2CZ47A	V_{FM}	$I_{FM} = 2.5A$	—	0.98	V
	5FL2CZ47A			—	1.3	
	5GL2CZ47A			—	1.8	
Repetitive Peak Reverse Current (Note 1)	5DL2CZ47A	I_{RRM}	$V_{RRM} = \text{Rated}$	—	10	μA
	5FL2CZ47A			—	10	
	5GL2CZ47A			—	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	—	3.8	°C/W

Note 1 : A value of one cell.

POLARITY

MARKING



*1	MARK	5DL2CZ	TYPE	5DL2CZ47A
		5FL2CZ		5FL2CZ47A
		5GL2CZ		5GL2CZ47A
*2	A			
*3	Lot Number			
	<input type="checkbox"/> <input type="checkbox"/> - Month (Starting from Alphabet A) <input type="checkbox"/> - Year (Last Number of the Christian Era)			

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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.

