#### TOSHIBA HIGH EFFICIENCY DIODE STACK (HED) SILICON EPITAXIAL TYPE

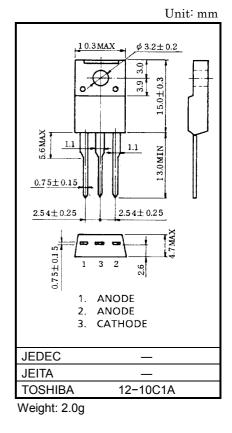
# 16DL2CZ47A,16FL2CZ47A

### SWITCHING MODE POWER SUPPLY APPLICATION CONVERTER & CHOPPER APPLICATION

- Repetitive Peak Reverse Voltage : V<sub>RRM</sub> = 200, 300V
- Average Output Rectified Current : I<sub>O</sub> = 16A
- Ultra Fast Reverse-Recovery Time: trr = 35ns (Max)
- Low Switching Losses and Output Noise.

#### MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT	
Repetitive Peak	16DL2CZ47A	V <sub>RRM</sub>	200	V	
Reverse Voltage	16FL2CZ47A	VRRM	100	v	
Average Output Rectified Current (Full Sine Waveform)		Ι <sub>Ο</sub>	16	A	
Peak One Cycle Surge Forward Current (Non-Repetitive)		l=o	80 (50Hz)	А	
		IFSM	88 (60Hz)	~	
Junction Temperature		Tj	-40~150	°C	
Storage Temperature Range		T <sub>stg</sub>	-40~150	°C	
Screw Torque			0.6	N∙m	



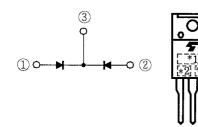
## ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN	TYP.	MAX	UNIT
Peak Forward Voltage (Note 1)	16DL2CZ47A	\/	I <sub>FM</sub> = 8A	_	_	0.98	v
	16FL2CZ47A	V <sub>FM</sub>	IFM - OA	_	—	1.3	v
Repetitive Peak ReverseCurrent (Note 1)		I <sub>RRM</sub>	V <sub>RRM</sub> = Rated		_	50	μA
Reverse Recovery Time (Note 1)		t <sub>rr</sub>	I <sub>F</sub> = 2.0A, di / dt = -50A / μs	-	_	35	ns
Forward Recovery Time (Note 1)		t <sub>fr</sub>	I <sub>F</sub> = 1.0A	_	_	100	ns
Thermal Resistance		R <sub>th (j−c)</sub>	DC Total, Junction to Case	-	_	3.3	°C/W

Note 1: A value of one cell.

#### POLARITY

#### MARKING

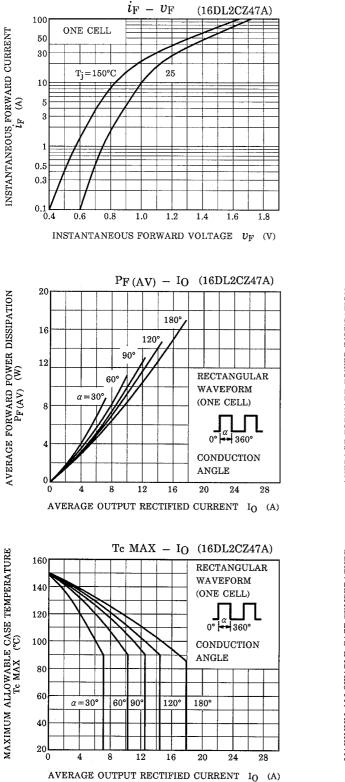


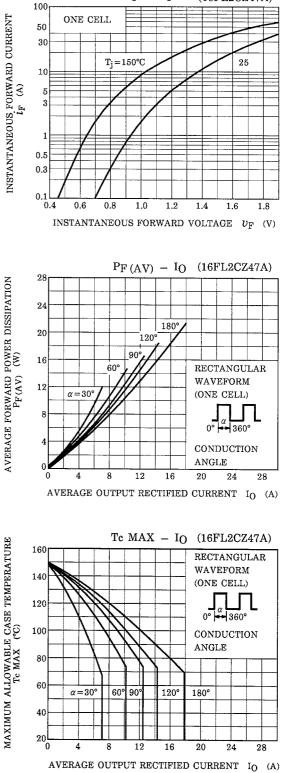
	* 1	MARK	16DL2CZ	TYPE	16DL2CZ47A			
			16FL2CZ		16FL2CZ47A			
ſ	* 2	A						
	* 3	* 3 Lot Number * 3 Imported The Month (Starting from Alphabet A) ——Year (Last Number of the Christian Era)						

# <u>TOSHIBA</u>

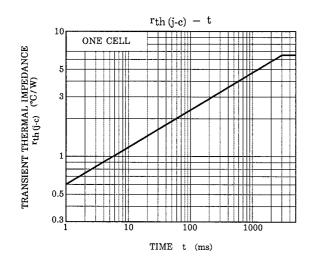
(16FL2CZ47A)

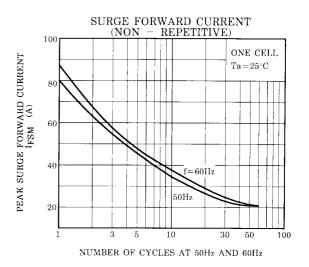
 $i_{\rm F} = v_{\rm F}$ 

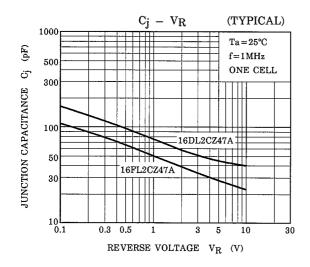




# **TOSHIBA**







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