

TOSHIBA HIGH EFFICIENCY DIODE STACK (HED) SILICON EPITAXIAL TYPE

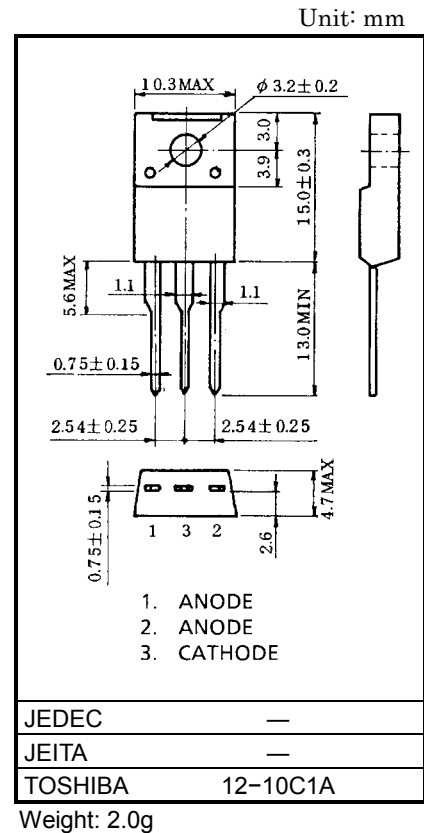
## 20DL2CZ47A, 20FL2CZ47A

SWITCHING MODE POWER SUPPLY APPLICATIONS  
CONVERTER & CHOPPER APPLICATION

- Repetitive Peak Reverse Voltage :  $V_{RRM} = 200, 300V$
- Average Output Rectified Current :  $I_O = 20A$
- Ultra Fast Reverse-Recovery Time :  $t_{rr} = 35ns$  (Max)
- Low Switching Losses and Low Output Noise

### MAXIMUM RATINGS ( $T_a = 25^\circ C$ )

CHARACTERISTIC		SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	20DL2CZ47A	$V_{RRM}$	200	V
	20FL2CZ47A		300	
Average Output Rectified Current (Full Sine Waveform)		$I_O$	20	A
Peak One Cycle Surge Forward Current (Non-Repetitive)		$I_{FSM}$	100 (50Hz)	A
			110 (60Hz)	
Junction Temperature		$T_j$	-40~150	$^\circ C$
Storage Temperature Range		$T_{stg}$	-40~150	$^\circ C$
Screw Torque		—	0.6	N·m

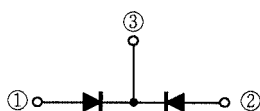


### ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ C$ )

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP.	MAX	UNIT
Peak Forward Voltage (Note 1)	20DL2CZ47A	$I_{FM} = 10A$	—	—	0.98	V
	20FL2CZ47A		—	—	1.3	
Repetitive Peak Reverse Current (Note 1)	$I_{RRM}$	$V_{RRM} = \text{Rated}$	—	—	50	$\mu A$
Reverse Recovery Time (Note 1)	$t_{rr}$	$I_F = 2.0A, di/dt = -50A/\mu s$	—	—	35	ns
Forward Recovery Time (Note 1)	$t_{fr}$	$I_F = 1.0A$	—	—	100	ns
Thermal Resistance	$R_{th(j-c)}$	DC Total, Junction to Case	—	—	3.0	$^\circ C/W$

Note 1: A value of one cell.

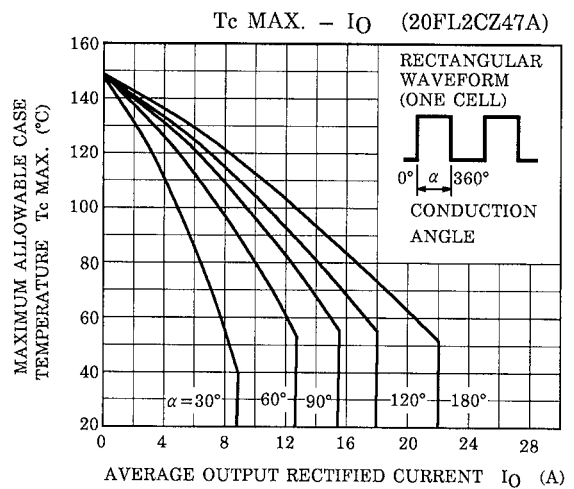
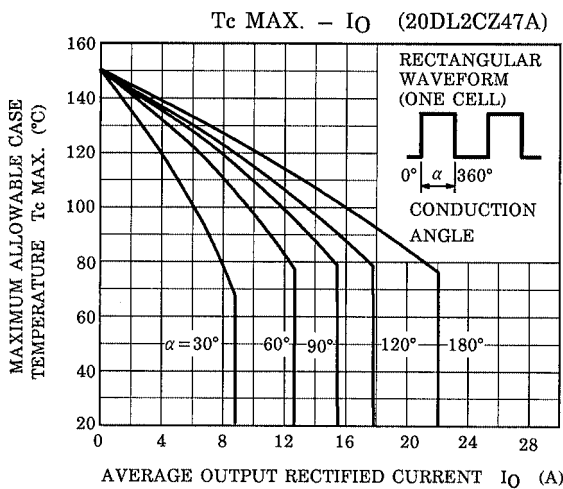
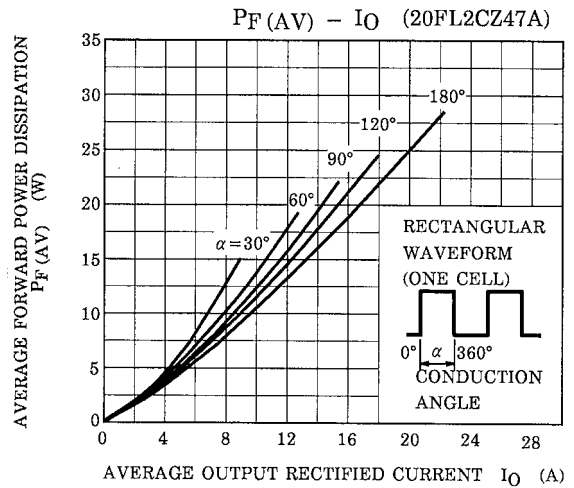
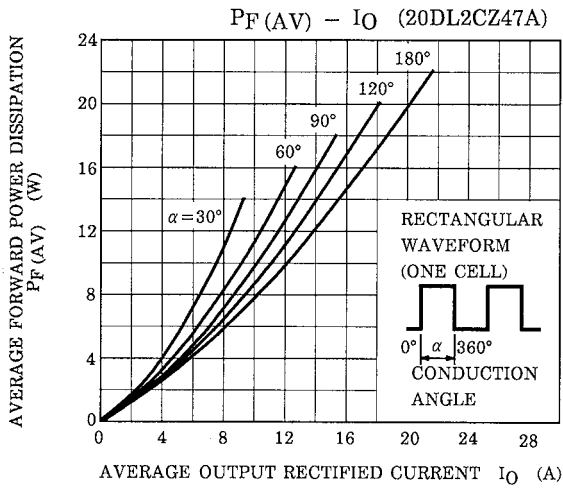
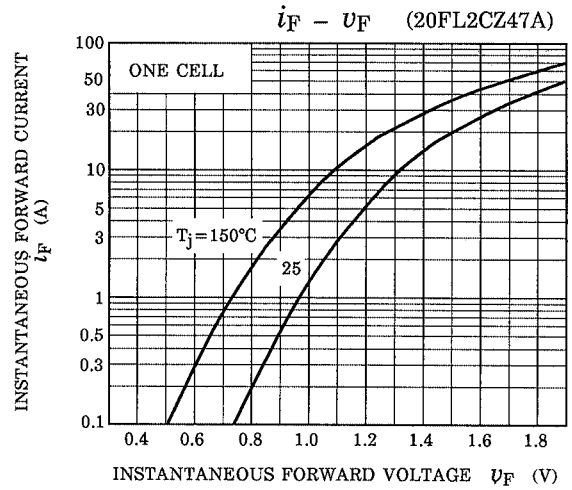
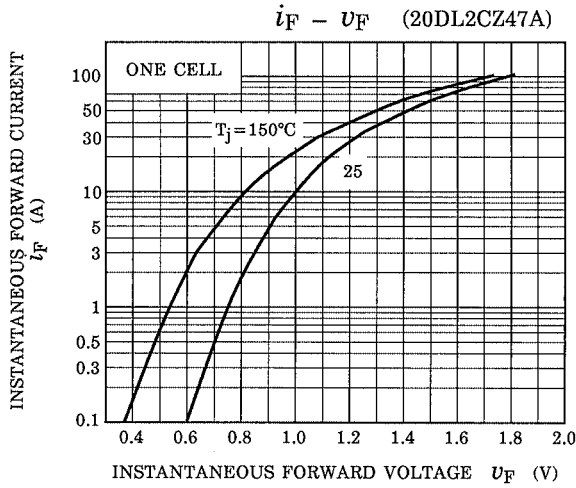
### POLARITY

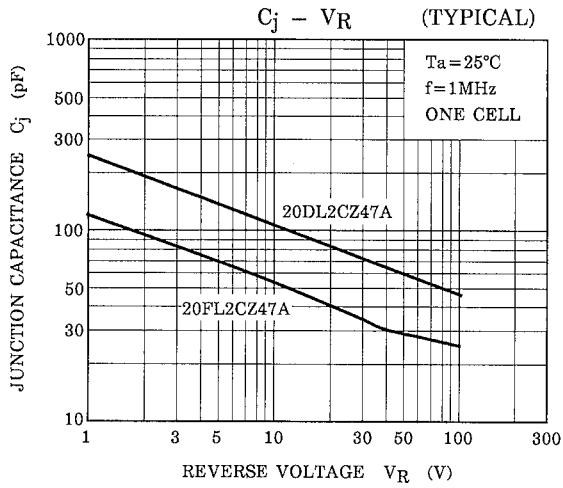
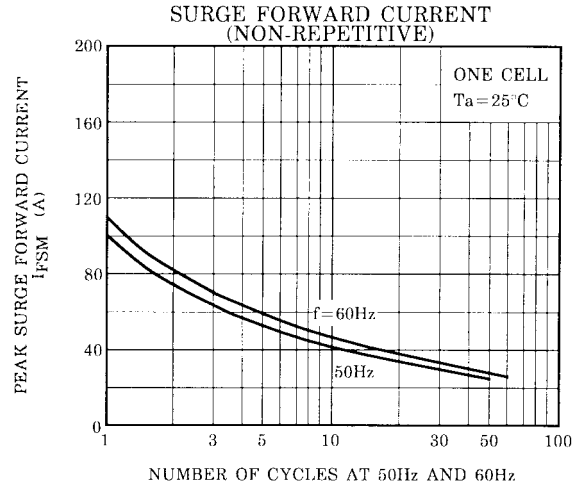
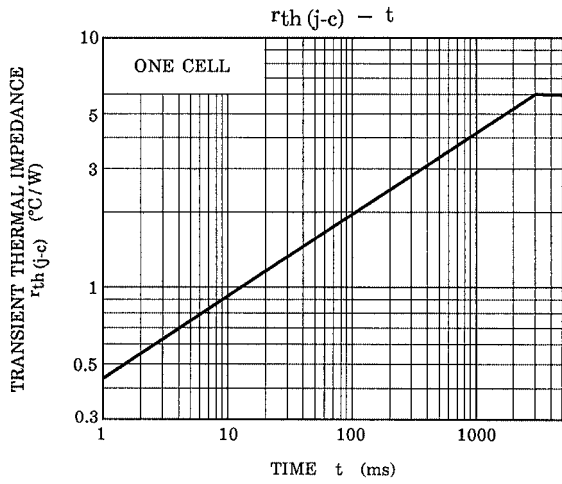


### MARKING



* 1	MARK	20DL2CZ	TYPE	20DL2C47A
		20FL2CZ		20FL2C47A
* 2	A			
* 3	Lot Number			
	□	□	Month (Starting from Alphabet A)	
	□	Year (Last Number of the Christian Era)		





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