

TOSHIBA High Efficiency Diode Stack (HED) Silicon Epitaxial Type

5DL2C48A, 5FL2C48A, U5DL2C48A, U5FL2C48A

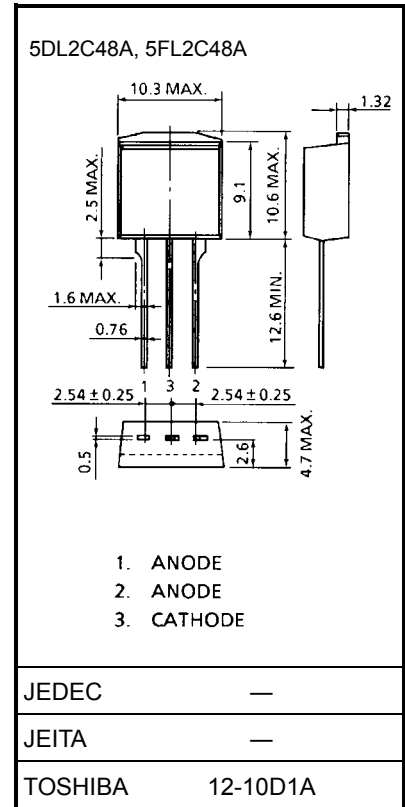
Switching Mode Power Supply Application
 Converter & Chopper Application

- Repetitive peak reverse voltage: $V_{DRM} = 200, 300 \text{ V}$
- Average output rectified current: $I_O = 5 \text{ A}$
- Ultra fast reverse-recovery time: $t_{rr} = 35 \text{ ns (Max)}$
- Low switching losses and output noise

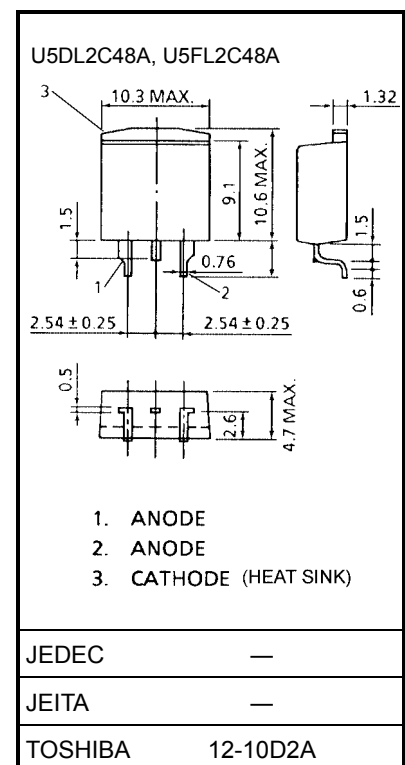
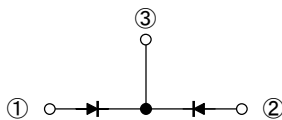
Maximum Ratings ($T_a = 25^\circ\text{C}$)

Characteristics	Symbol	Rating	Unit
Repetitive peak Repetitive voltage	5DL2C48A	200	V
	U5DL2C48A		
	5FL2C48A	300	
	U5FL2C48A		
Average output rectified current	I_O	5	A
Peak one cycle surge forward current	I_{FSM}	25 (50 Hz)	A
		27.5 (60 Hz)	
Junction temperature	T_j	-40~150	$^\circ\text{C}$
Storage temperature range	T_{stg}	-40~150	$^\circ\text{C}$

Unit: mm



Polarity

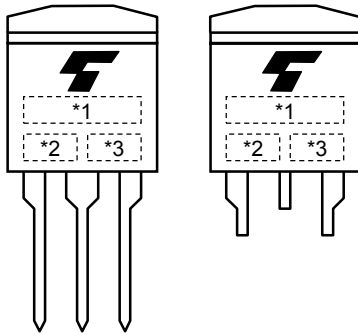


Electrical Characteristics (Ta = 25°C)

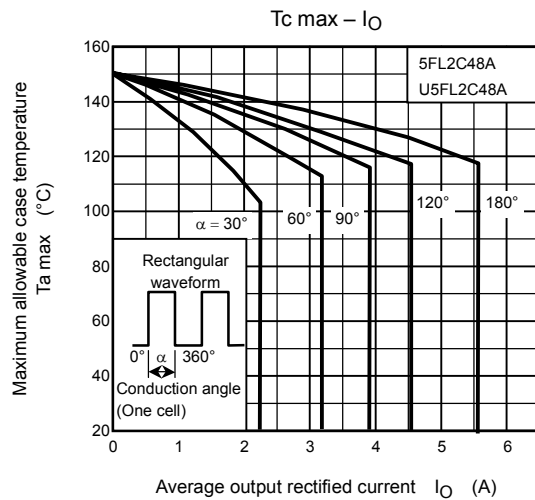
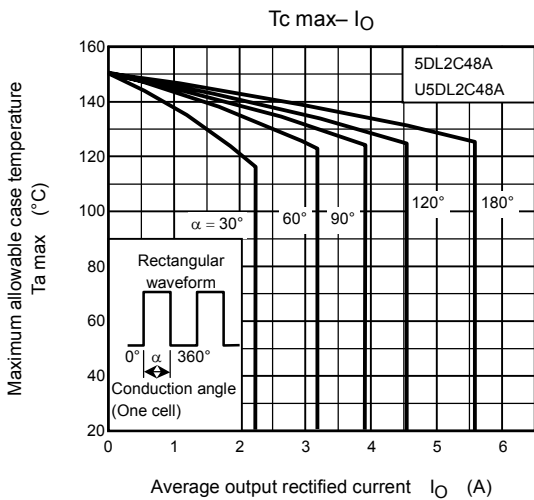
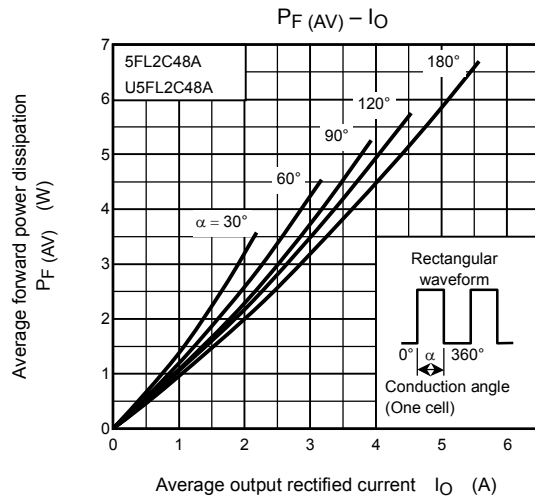
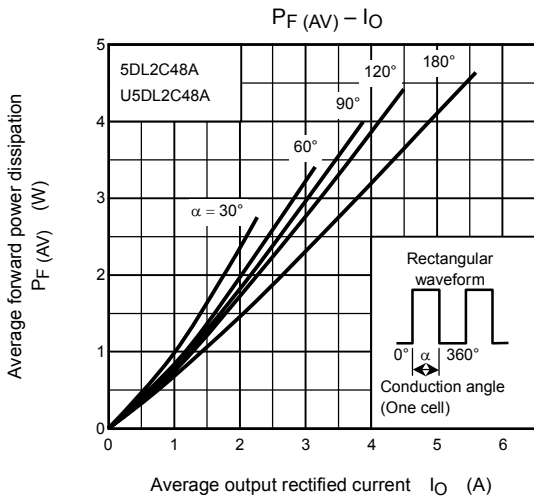
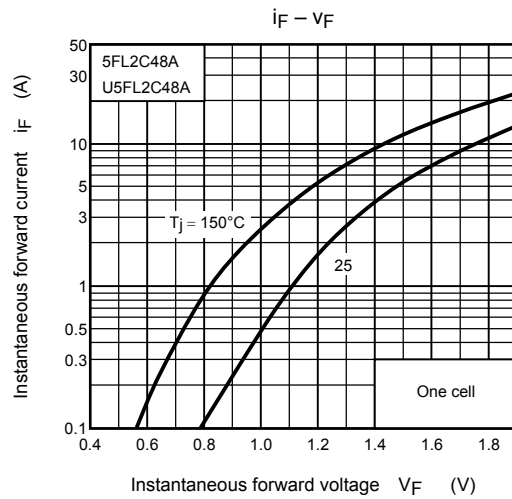
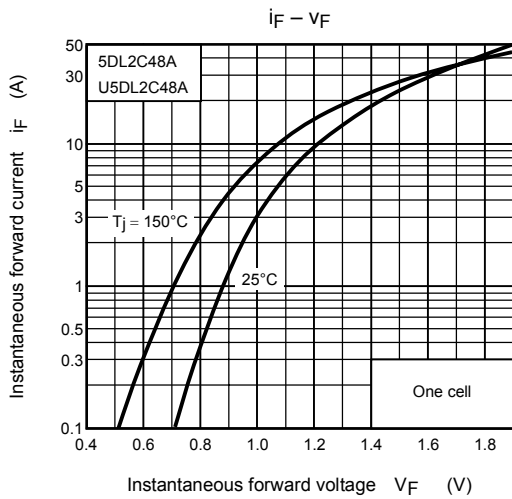
Characteristics	Symbol	Test Condition	Typ.	Max	Unit	
Peak forward voltage	V _{FM}	I _{FM} = 2.5 A	—	0.98	V	
				1.3		
			—	10		μA
			—	35		ns
Reverse recovery time	t _{rr}	I _F = 2 A, di/dt = -20 A/μs	—	100	ns	
Forward recovery time	t _{fr}	I _F = 1 A	—	3.5	°C/W	
Thermal resistance	R _{th(j-c)}	DC total, junction to case	—			

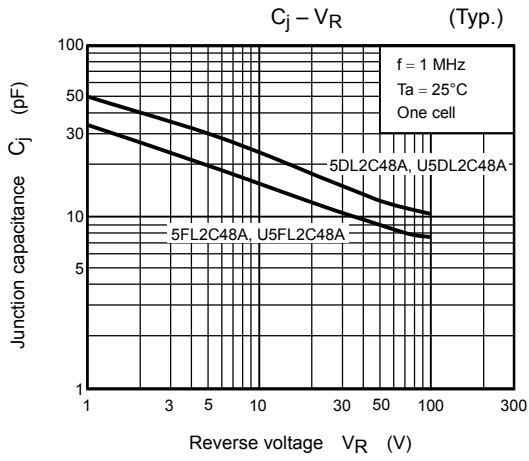
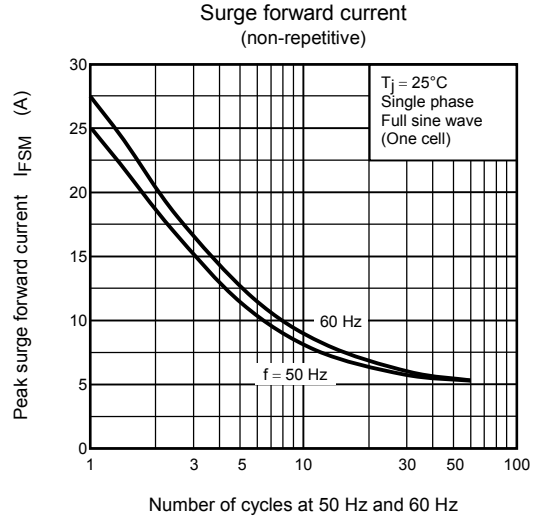
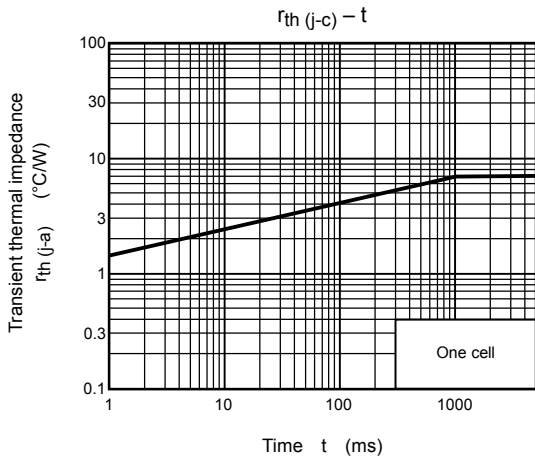
V_{FM}, I_{RRM}, t_{rr}, t_{fr}: A Value of one cell.

Marking



*1	Mark	5DL2C	Type	5DL2C48A, U5DL2C48A
		5FL2C		5FL2C48A, U5FL2C48A
*2	A			
*3	Lot number Month of manufacture (January to December are denoted by letter A to L respectively.) Year of manufacture (Last decimal digit of the year of manufacture)			





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