

TOSHIBA HIGH EFFICIENCY DIODE STACK (HED) SILICON EPITAXIAL TYPE

# 10JL2C48A, U10JL2C48A

SWITCHING TYPE POWER SUPPLY APPLICATION  
CONVERTER & CHOPPER APPLICATION

- Repetitive Peak Reverse Voltage :  $V_{RRM} = 600\text{ V}$
- Average Output Rectified Current :  $I_O = 10\text{ A}$
- Ultra Fast Reverse-Recovery Time :  $t_{rr} = 35\text{ ns (Max.)}$
- Low Switching Losses and Output Noise.

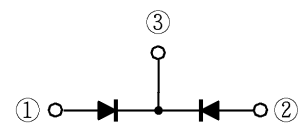
Unit in mm

10JL2C48A		U10JL2C48A	
<p>1. ANODE 2. ANODE 3. CATHODE</p>		<p>1. ANODE 2. ANODE 3. CATHODE</p>	
JEDEC	—	JEDEC	—
EIAJ	—	EIAJ	—
TOSHIBA	12-10D1A	TOSHIBA	12-10D2A

**MAXIMUM RATINGS**

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	$V_{RRM}$	600	V
Average Output Rectified Current	$I_O$	10	A
Peak One Cycle Surge Forward Current (Non-Repetitive, Sine Wave)	$I_{FSM}$	40	A
Junction Temperature	$T_j$	-40~150	°C
Storage Temperature Range	$T_{stg}$	-40~150	°C

**POLARITY**



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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.

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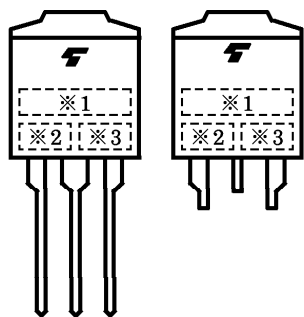
● The information contained herein is subject to change without notice.

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage (Note)	V <sub>FM</sub>	I <sub>FM</sub> = 5 A	—	—	4.0	V
Repetitive Peak Reverse Current (Note)	I <sub>R</sub> RM	V <sub>R</sub> RM = 600 V	—	—	50	μA
Reverse Recovery Time (Note)	t <sub>rr</sub>	I <sub>F</sub> = 2 A, di / dt = -20 A / μs	—	—	35	ns
Junction Capacitance	C <sub>j</sub>	V <sub>R</sub> = 10 V, f = 1.0 MHz	—	36	—	pF
Thermal Resistance	R <sub>th(j-c)</sub>	DC Total	—	—	2.5	°C / W

(Note) : A value of one cell.

MARKING



※ 1	MARK	10JL2C	TYPE	10JL2C48A, U10JL2C48A
※ 2	A			
※ 3	Lot Number			
	<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; width: 15px; height: 15px; margin-right: 5px;"></div> <div style="border: 1px solid black; width: 15px; height: 15px; margin-right: 5px;"></div> <div style="margin-left: 5px;">— Month (Starting from Alphabet A)</div> </div> <div style="margin-left: 20px;"> <div style="border: 1px solid black; width: 15px; height: 15px; margin-right: 5px;"></div> <div style="margin-left: 5px;">— Year (Last Number of the Christian Era)</div> </div>			

