TOSHIBA

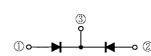
TOSHIBA HIGH EFFICIENCY DIODE STACK (HED) SILICON EPITAXIAL TYPE

16DL2C41A

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

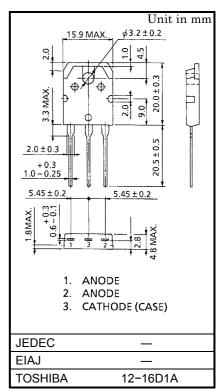
- Repetitive Peak Reverse Voltage : V_{RRM}=200V
- Average Output Rectified Current : IO=16A
- Ultra Fast Reverse-Recovery Time : trr=35ns (Max.)
- : VFM=0.98V (Max.) Low Forward Voltage
- Low Switching Losses and Output Noise.

POLARITY



MAXIMUM RATINGS

CHARACTERISTIC	SYMBOL	RATING	UNIT	
Repetitive Peak Reverse Voltage	V _{RRM}	200	V	
Average Output Rectified Current (Full Sine Waveform)	IO	16	А	
Peak One Cycle Surge Forward Current (Non-Repetitive)	IFSM	80 (50H _Z)	A	
		88 (60H _Z)		
Junction Temperature	Тj	-40~150	°C	
Strage Temperature Range	T _{stg}	-40~150	°C	



Weight : 4.85g

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 TOSHIBA is continually working to improve the quality and 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 comply with the standards of safety in making a safe design for the entire system, and
to avoid situations in which a malfunction or failure of such TOSHIBA products could cause loss of human life, bodily injury or damage to property.

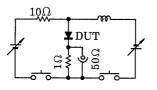
- damage to property.
 In developing your designs, please ensure that TOSHIBA products are used within specified operating ranges as set forth in the most recent TOSHIBA products specifications. Also, please keep in mind the precautions and conditions set forth in the "Handling Guide for Semiconductor Devices," or "TOSHIBA Semiconductor Reliability Handbook" etc..
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- The information contained herein is subject to change without notice.

ELECTRICAL CHARACTERISTICS (Ta=25°C) (Note 1)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	MAX.	UNIT
Peak Forward Voltage	V _{FM}	I _{FM} =8A	_	0.98	V
Repetitive Peak Reverse Current	I _{RRM}	V _{RRM} =Rated		50	μA
Reverse Recovery Time	t _{rr}	I _F =2.0A di / dt=-50A / μs (Note 2)	-	35	ns
Forward Recovery Time	t _{fr}	I _F =1.0A (Note 3)	_	100	ns
Thermal Resistance	R _{th (j−c)}	DC Total, Junction to Case	_	1.9	°C/W

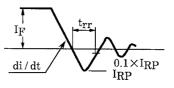
Note 1: A value of one cell.

Note 2: trr TEST CIRCUIT

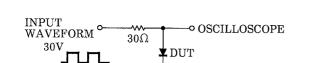


trr Waveform

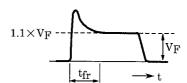
tfr Waveform



Note 3: tfr TEST CIRCUIT



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