

TOSHIBA HIGH EFFICIENCY RECTIFIER SILICON EPITAXIAL TYPE

5DLZ47A

SWITCHING TYPE POWER SUPPLY APPLICATION

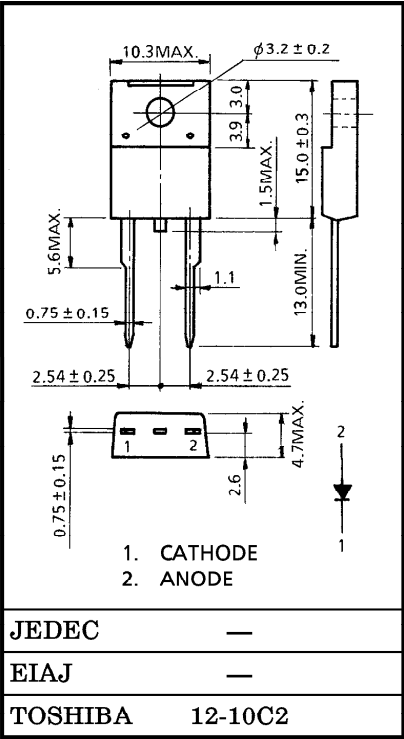
CONVERTER & CHOPPER APPLICATION

- Repetitive Peak Reverse Voltage : $V_{RRM}=200V$
- Average Output Rectified Current : $I_O=5A$
- Ultra Fast Reverse-Recovery Time : $t_{rr}=35ns$ (Max.)
- Low Forward Voltage : $V_{FM}=0.98V$
- Low Switching Losses and Low Output Noise.

MAXIMUM RATINGS

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	200	V
Average Output Rectified Current	I_O	5	A
Peak One Cycle Surge Forward Current (Non-Repetitive)	I_{FSM}	50 (50Hz) 60 (60Hz)	A
Junction Temperature	T_j	-40~150	°C
Storage Temperature Range	T_{stg}	-40~150	°C
Screw Torque	—	0.6	N·m

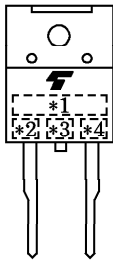
Unit in mm



JEDEC	—
EIAJ	—
TOSHIBA	12-10C2

Weight : 2.0g

MARKING



*1	MARK	5DLZ47	TYPE	5DLZ47A
*2	A			
*3	Polarity	—————⏏—————		
*4	Lot Number Month (Starting from Alphabet A) Year (Last Number of the Christian Era)			

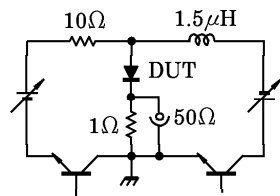
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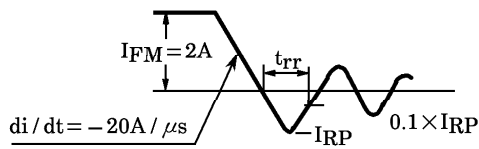
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	MAX.	UNIT
Peak Forward Voltage	V_{FM}	$I_{FM} = 5A$	—	0.98	V
Repetitive Peak Reverse Current	I_{RRM}	$V_{RRM} = 200V$	—	10	μA
Reverse Recovery Time (Note 1)	t_{rr}	$I_F = 2A, di/dt = -20A/\mu s$	—	35	ns
Forward Recovery Time (Note 2)	t_{fr}	$I_F = 1A$	—	100	ns
Thermal Resistance	$R_{th(j-c)}$	DC	—	4.0	$^{\circ}C/W$

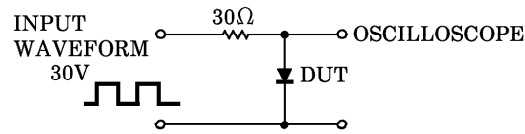
Note 1 : t_{rr} TEST CIRCUIT



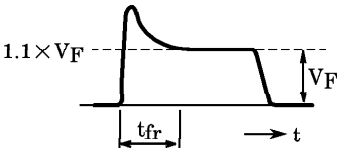
t_{rr} WAVEFORM



Note 2 : t_{fr} TEST CIRCUIT



t_{fr} WAVEFORM



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