TOSHIBA HIGH EFFICIENCY DIODE STACK (HED) SILICON EPITAXIAL TYPE

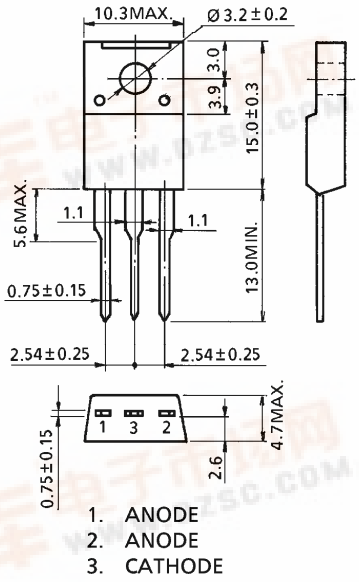
10JL2CZ47A

SWITCHING TYPE POWER SUPPLY APPLICATION

CONVERTER & CHOPPER APPLICATION

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

Unit in mm



JEDEC	—
EIAJ	—
TOSHIBA	12-10C1A

Weight : 2.0 g

MAXIMUM RATINGS

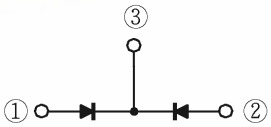
CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	600	V
Average Output Rectified Current	I_O	10	A
Peak One Cycle Surge Forward Current (Non-Repetitive, Sine Wave)	I_{FSM}	40 (50 Hz)	A
Junction Temperature	T_j	−40~150	°C
Storage Temperature Range	T_{stg}	−40~150	°C
Screw Torque	—	0.6	N·m

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

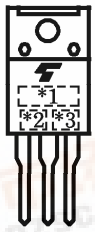
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage (Note 1)	V_{FM}	I_{FM} = 5 A	—	—	4.0	V
Repetitive Peak Reverse Current (Note 1)	I_{RRM}	V_{RRM} = 600 V	—	—	50	μA
Reverse Recovery Time (Note 1)	t_{rr}	I_F = 2 A, di / dt = −20 A / μs	—	—	35	ns
Forward Recovery Time (Note 1)	t_{fr}	I_F = 1 A	—	—	150	ns
Thermal Resistance	$R_{th\,(j\text{-}c)}$	DC Total, Junction to Case	—	—	3.6	°C / W

(Note 1) A value of one cell.

POLARITY



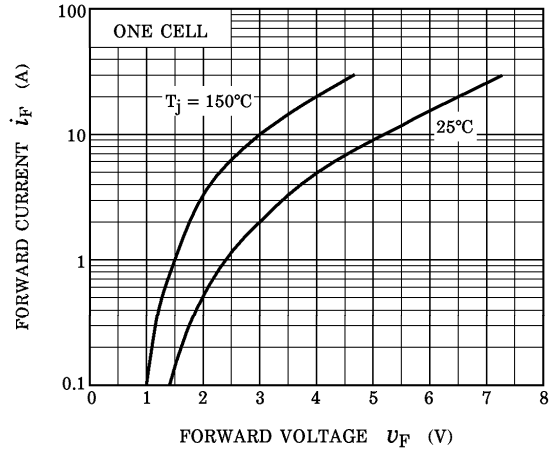
MARKING



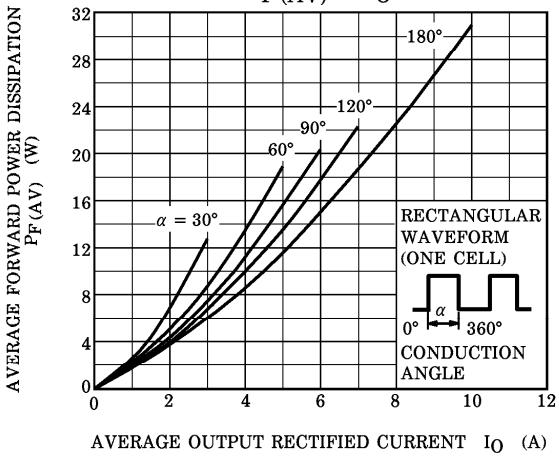
*1	MARK	10JL2CZ	TYPE	10JL2CZ47A
*2	A			
*3	Lot Number □□ — Month (Starting from Alphabet A) └ Year (Last Number of the Christian Era)			

961001EAA2

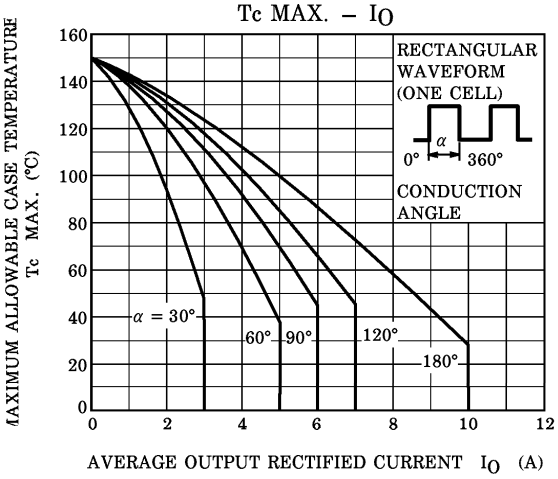
$i_F - v_F$



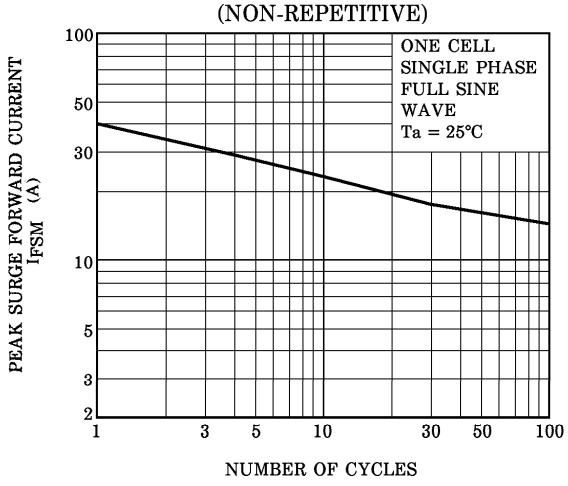
$P_{F(AV)} - I_O$



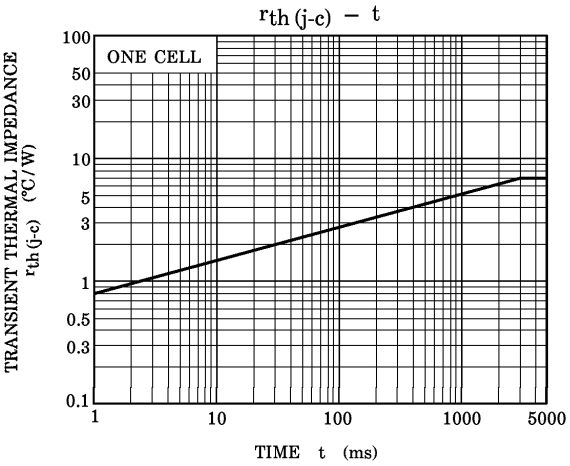
Tc MAX. – I_O



SURGE FORWARD CURRENT (NON-REPETITIVE)



$r_{th\,(j\text{-}c)} - t$



$C_j - V_R$ (TYPICAL)