

TOSHIBA HIGH EFFICIENCY RECTIFIER SILICON EPITAXIAL TYPE

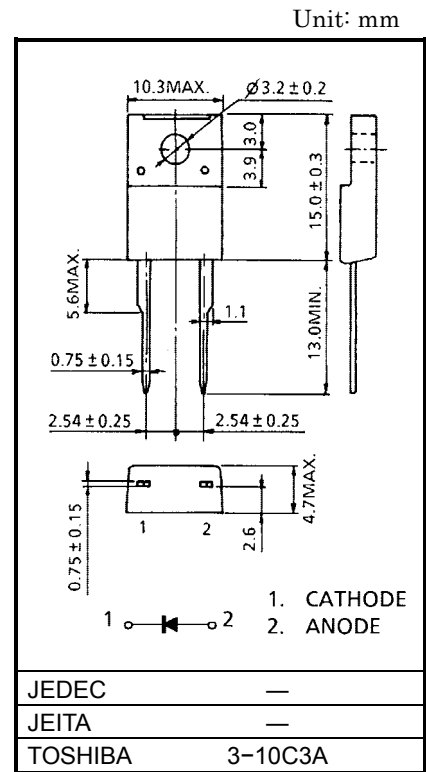
5GUZ47

SWITCHING MODE POWER SUPPLY APPLICATION
CONVERTER & CHOPPER APPLICATION

- Repetitive Peak Reverse Voltage : $V_{RRM} = 400V$
- Average Forward Current : $I_F (AV) = 5A$
- Ultra Fast Reverse-Recovery Time : $t_{rr} = 100ns$
- Low Switching Losses and Low Output Noise.

MAXIMUM RATINGS (Ta = 25°C)

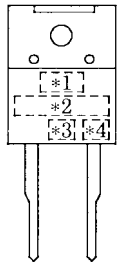
CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	400	V
Average Forward Current	$I_F (AV)$	5	A
Peak One Cycle Surge Forward Current (Non-Repetitive)	I_{FSM}	50 (50Hz) 60 (60Hz)	A
Junction Temperature	T_j	-40~150	°C
Storage Temperature Range	T_{stg}	-40~150	°C



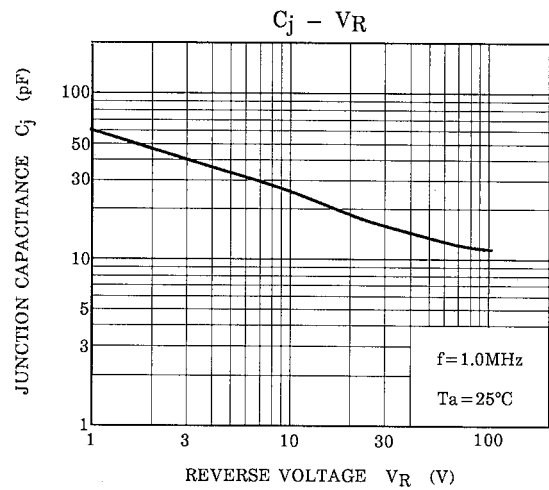
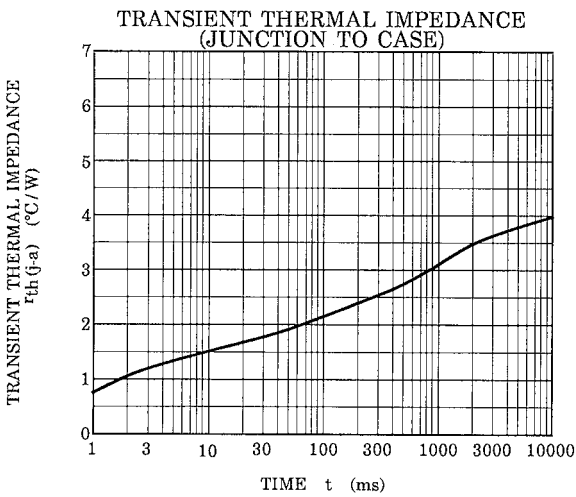
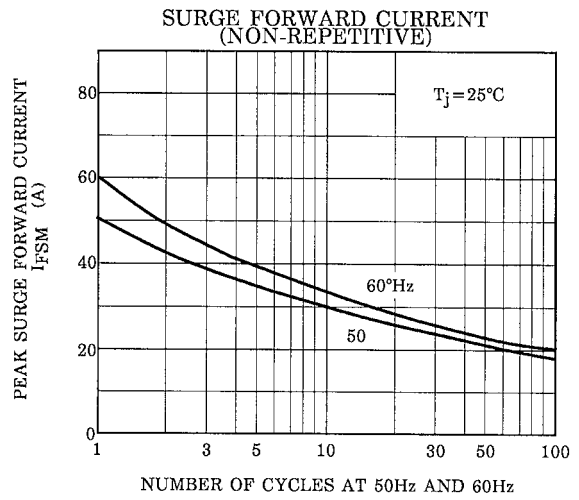
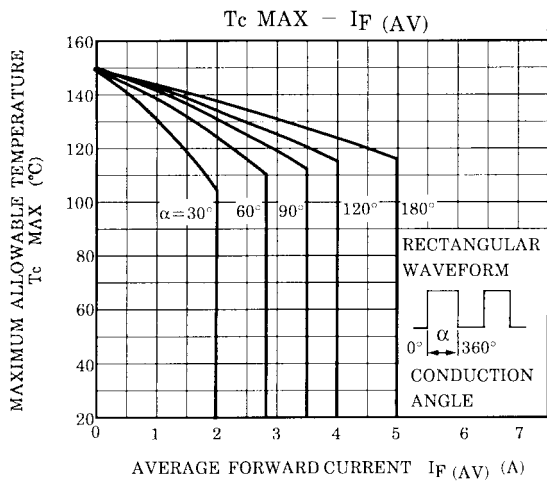
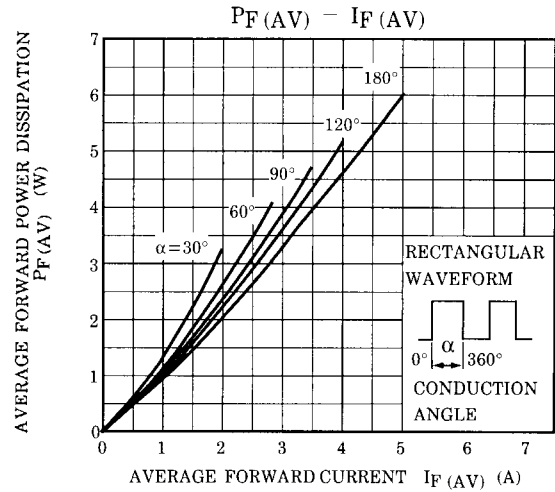
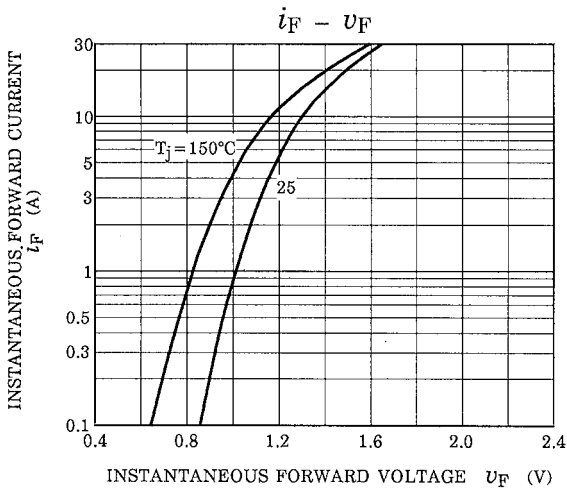
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Peak Forward Voltage	V_{FM}	$I_{FM} = 5A$	—	1.2	V
Repetitive Peak Reverse Current	I_{RRM}	$V_{RRM} = 400V$	—	100	μA
Reverse Recovery Time	t_{rr}	$I_F = 2A, di / dt = -20A / \mu s$	—	100	ns
Forward Recovery Time	t_{fr}	$I_F = 1A$	—	200	ns
Thermal Resistance	$R_{th(j-c)}$	DC	—	4.0	°C / W

MARKING



* Number	SYMBOL	MARK
* 1	Toshiba Product Mark	
* 2	TYPE Code	5GUZ47
* 3	Polarity Mark	
* 4	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; margin-left: 10px;"></div> <div style="margin-left: 10px;">Month (Starting from Alphabet A)</div> </div> <div style="margin-left: 10px;">Year (Last Number of the Christian Era)</div>	



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