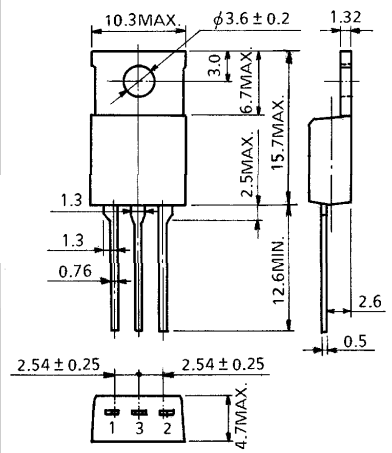
TOSHIBA SCHOTTKY BARRIER RECTIFIER SCHOTTKY BARRIER TYPE

5FWJ2C42

HIGH SPEED RECTIFIER APPLICATION

Unit in mm

- Average Output Rectified Current : $I_O = 5.0A$
- Repetitive Peak Reverse Voltage : $V_{RRM} = 30V$
- Low Forward Voltage : $V_{FM} = 0.55V$



1. ANODE
2. ANODE
3. CATHODE (COMMON)

JEDEC	TO-220AB
EIAJ	—
TOSHIBA	12-10E1A

Weight : 2.0g

MAXIMUM RATINGS (Ta = 25°C)

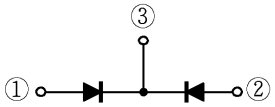
CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Average Forward Current (Tc = 114°C)	I_O	5.0	A
Peak One Cycle Surge Forward Current (Non-Repetitive)	I_{FSM}	50 (50Hz)	A
Junction Temperature	T_j	−40~125	°C
Storage Temperature Range	T_{stg}	−40~150	°C

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

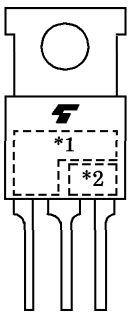
CHARACTERISTIC	SYMBOL	TEST CONDITION	TYP.	MAX.	UNIT
Peak Forward Voltage	V_{FM}	$I_{FM} = 2.5A$	—	0.55	V
Repetitive Peak Reverse Current	I_{RRM}	$V_{RRM} = 30V$	—	3.5	mA
Reverse Recovery Time	t_{rr}	$I_{FM} = 1.0A$, $di/dt = -30A/\mu s$	—	35	ns
Junction Capacitance	C_j	$V_R = 10V$, f = 1.0MHz	125	—	pF
Thermal Resistance	$R_{th\,(j-c)}$	DC Total, Junction to Case	—	3.0	°C/W

V_{FM}, I_{RRM}, t_{rr}, C_j : A value of one cell.

POLARITY



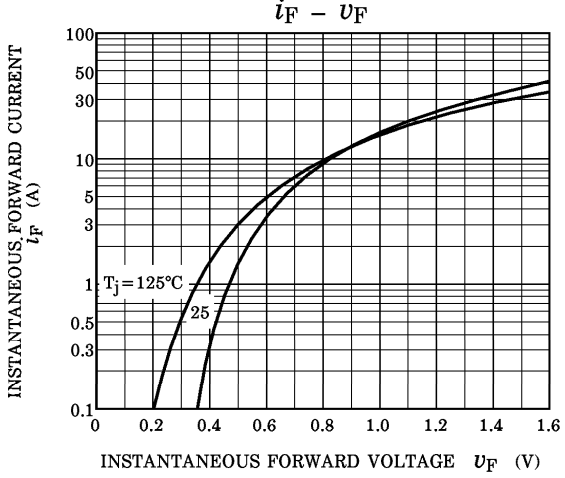
MARKING



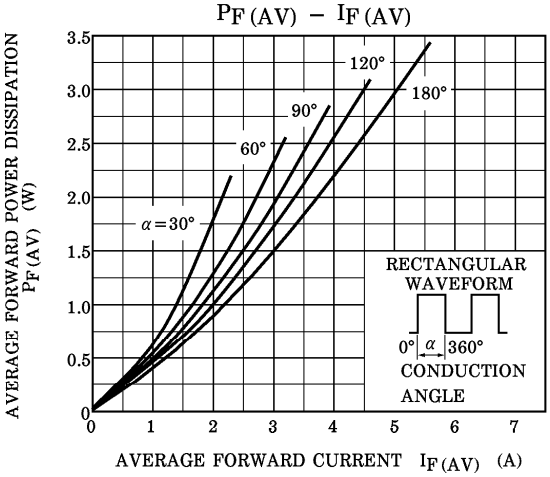
※1	TYPE	5FWJ2C42
※2	Lot Number □□ — Month (Starting from Alphabet A) — Year (Last Number of the Christian Era)	

961001EAA2

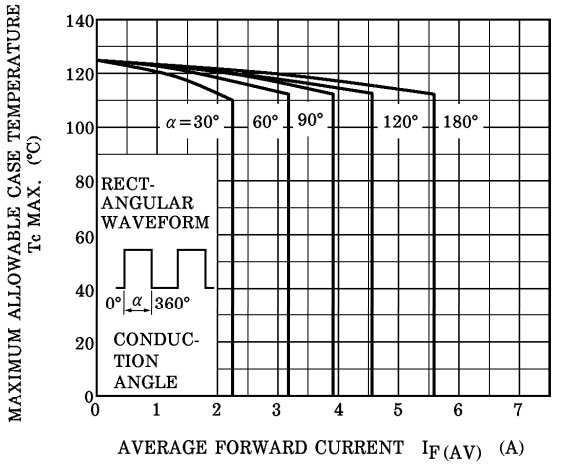
$i_F - v_F$



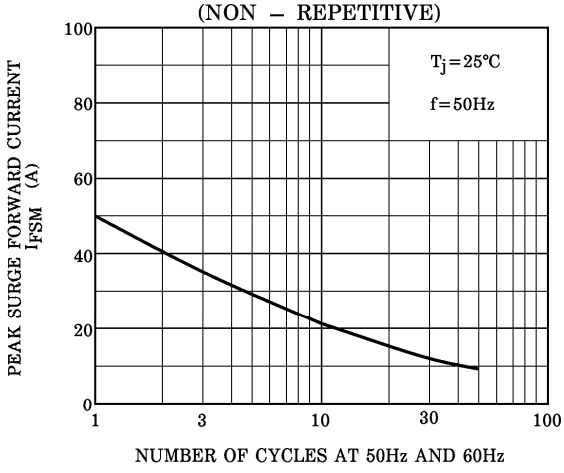
$P_{F(AV)} - I_{F(AV)}$



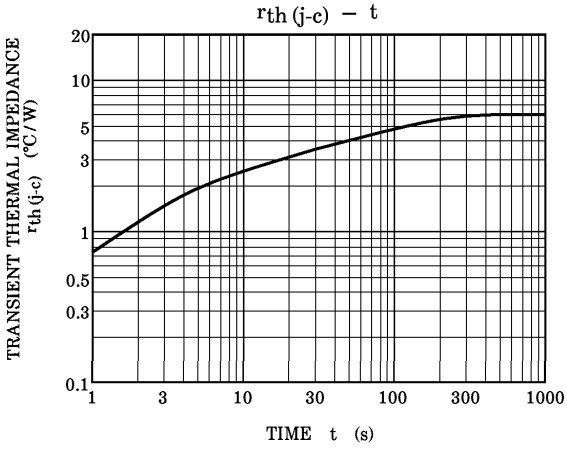
T_C MAX. $- I_{F(AV)}$



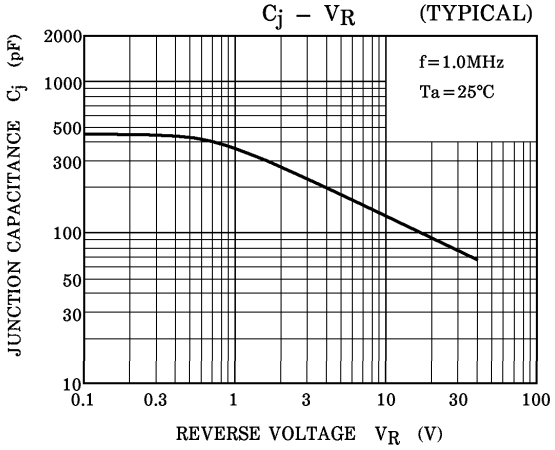
SURGE FORWARD CURRENT (NON – REPETITIVE)



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



$C_j - V_R$ (TYPICAL)



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