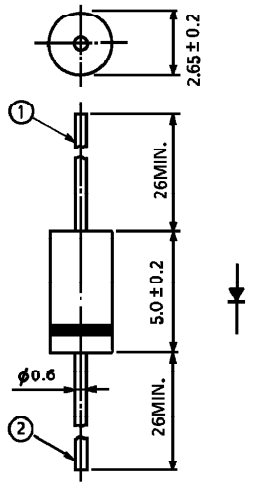
TOSHIBA FAST RECOVERY RECTIFIER SILICON DIFFUSED TYPE

1GH45

SWITCHING TYPE POWER SUPPLY APPLICATIONS

Unit in mm

- Repetitive Peak Reverse Voltage : V_{RRM} = 400V
- Average Forward Current : $I_{F(AV)}$ = 1.0A
- Very Fast Reverse-Recovery Time : t_{rr} = 200ns (Max.)



1. ANODE
2. CATHODE

JEDEC	—
EIAJ	—
TOSHIBA	3-3E1A

Weight : 0.225g

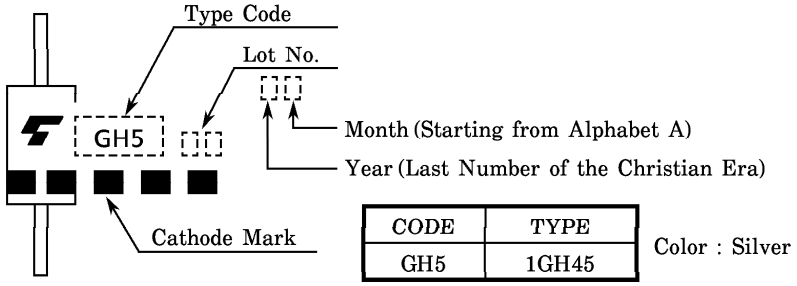
MAXIMUM RATINGS

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	400	V
Average Forward Current (Ta = 25°C)	$I_{F(AV)}$	1.0	A
Peak One Cycle Surge Forward Current (Non-Repetitive)	I_{FSM}	20 (50Hz)	A
		22 (60Hz)	
Junction Temperature Range	T_j	−40~150	°C
Storage Temperature Range	T_{stg}	−40~150	°C

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage	V_{FM}	I_{FM} = 1.0A	—	—	1.1	V
Repetitive Peak Reverse Current	I_{RRM}	V_{RRM} = 400V	—	—	100	μA
Reverse Recovery Time	t_{rr}	I_F = 1A, di / dt = −30A / μs	—	—	200	ns
Forward Recovery Time	t_{fr}	I_F = 1.0A	—	—	400	ns
Thermal Resistance	$R_{th(j-a)}$	Junction to Ambient	—	—	75	°C / W

Marking



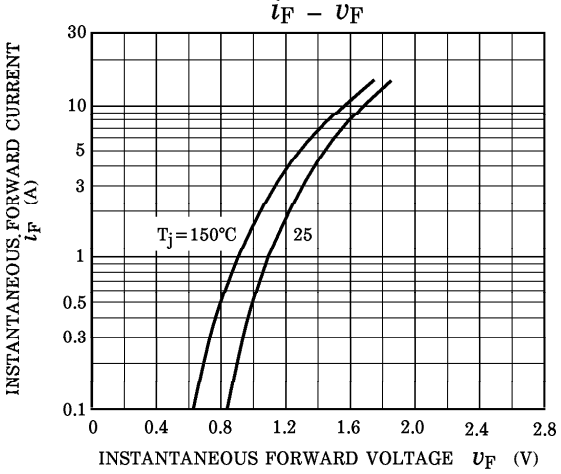
CODE	TYPE
GH5	1GH45

Color : Silver

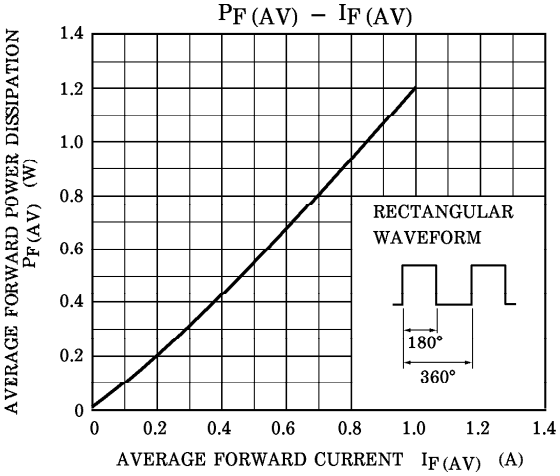
961001EAA2

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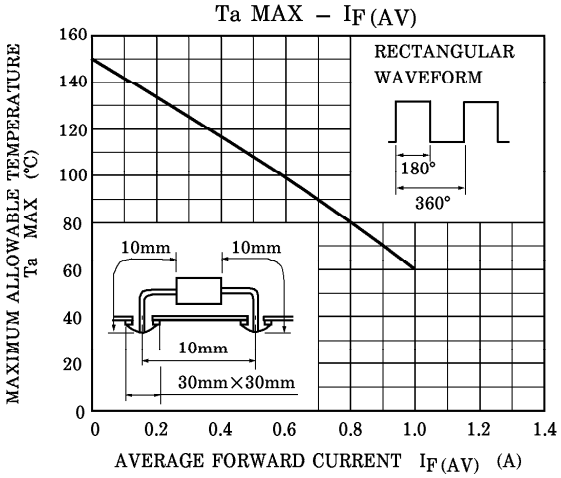
$i_F - v_F$



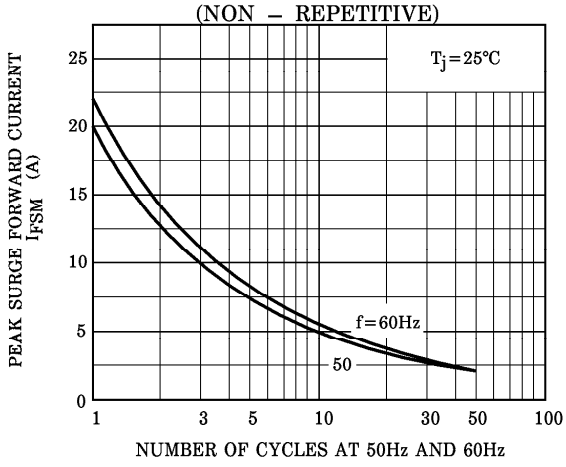
$P_{F(AV)} - I_{F(AV)}$



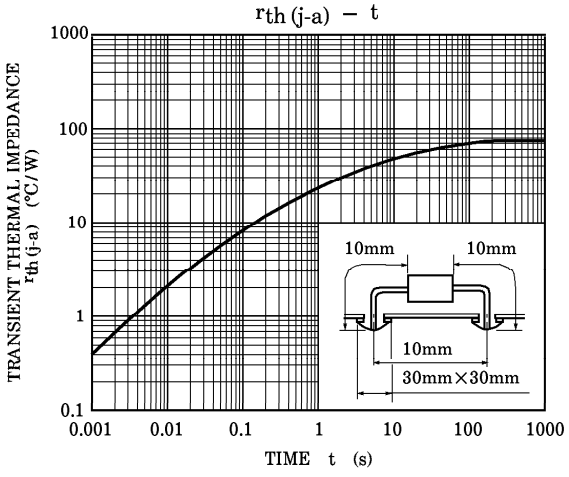
Ta MAX – $I_{F(AV)}$



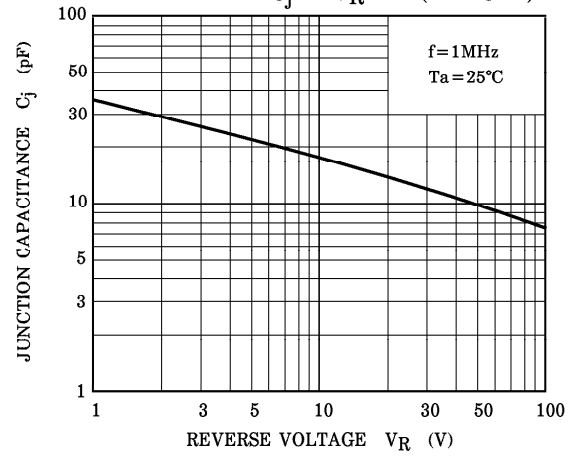
SURGE FORWARD CURRENT (NON – REPETITIVE)



$r_{th(j-a)} - t$



$C_j - V_R$ (TYPICAL)



961001EAA2'

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