

TOSHIBA FAST RECOVERY RECTIFIER SILICON DIFFUSED TYPE

# 1GH45

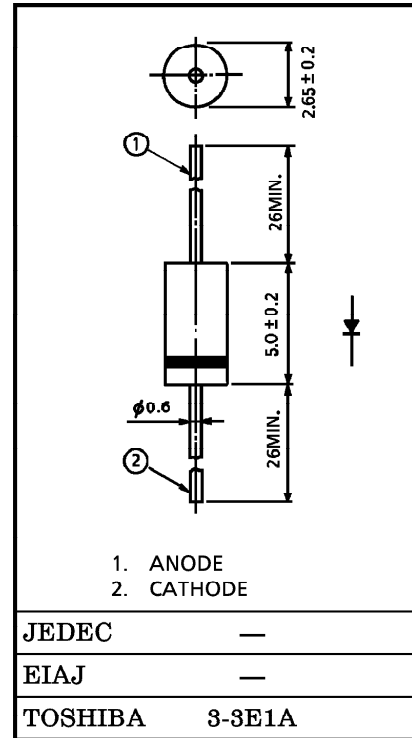
SWITCHING TYPE POWER SUPPLY APPLICATIONS

Unit in mm

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

**MAXIMUM RATINGS**

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	$V_{RRM}$	400	V
Average Forward Current ( $T_a = 25^\circ C$ )	$I_F (AV)$	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	$^\circ C$
Storage Temperature Range	$T_{stg}$	-40~150	$^\circ C$

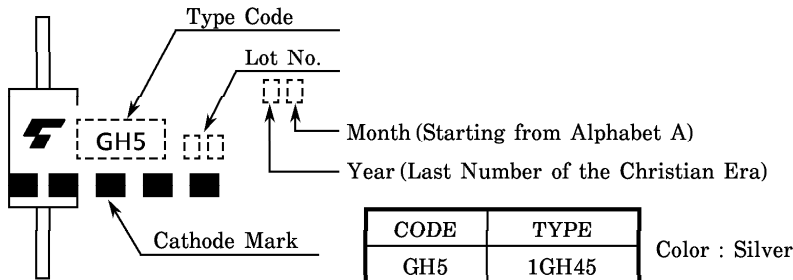


Weight : 0.225g

**ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ C$ )**

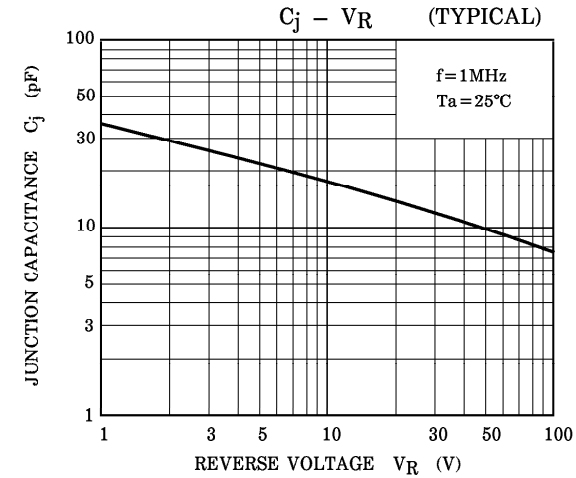
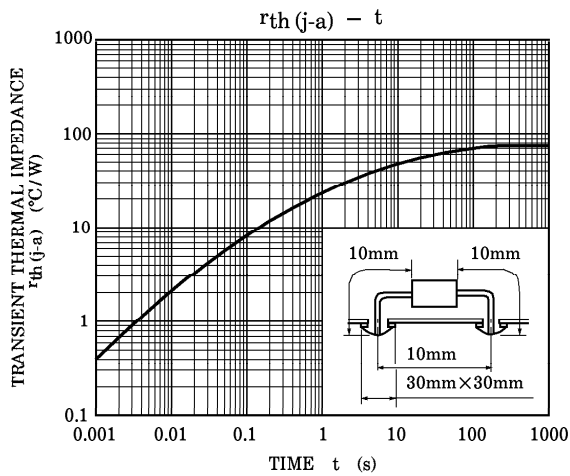
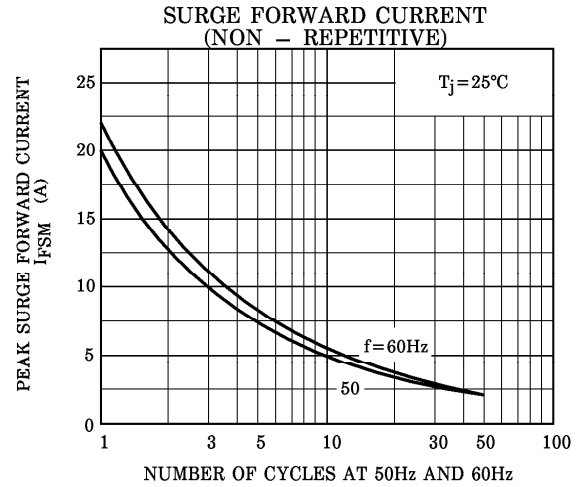
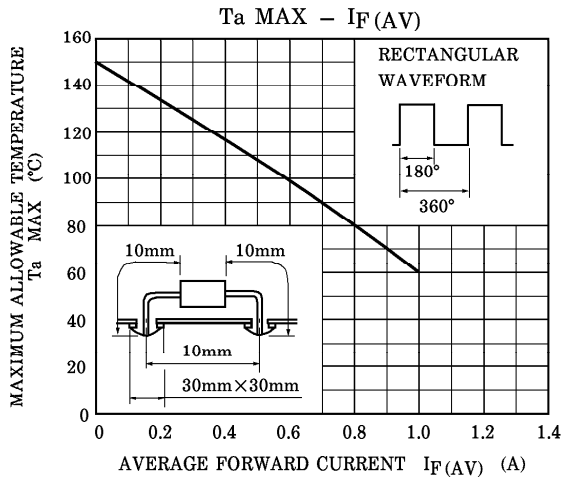
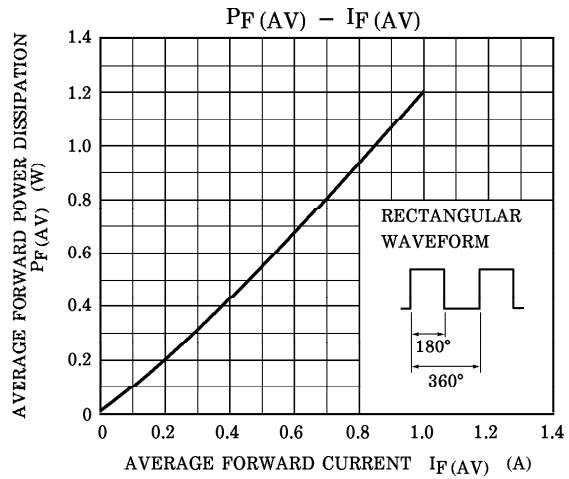
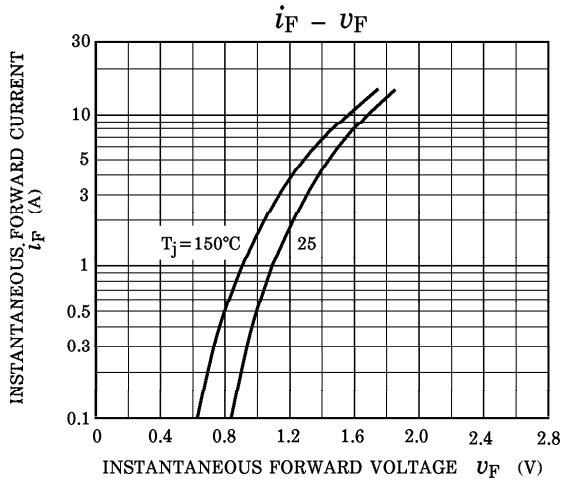
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage	$V_{FM}$	$I_{FM} = 1.0A$	—	—	1.1	V
Repetitive Peak Reverse Current	$I_{RRM}$	$V_{RRM} = 400V$	—	—	100	$\mu A$
Reverse Recovery Time	$t_{rr}$	$I_F = 1A, di / dt = -30A / \mu s$	—	—	200	ns
Forward Recovery Time	$t_{fr}$	$I_F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

**Marking**



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