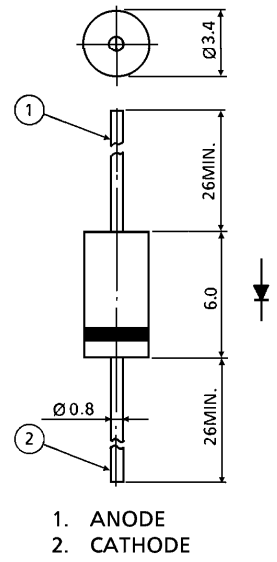
TOSHIBA RECTIFIER SILICON DIFFUSED TYPE

1S1834, 1S1835

HIGH SPEED RECTIFIER APPLICATIONS
(FAST RECOVERY)

Unit in mm

- Average Forward Current : $I_{F(AV)}$ = 1.0 A (Ta = 50°C)
- Repetitive Peak Reverse Voltage : V_{RRM} = 400~600 V
- Reverse Recovery Time : $t_{rr(1)}$ = 1.5 μs
  : $t_{rr(2)}$ = 0.35 μs
- Plastic Mold Type.



1. ANODE
2. CATHODE

JEDEC	DO-15
EIAJ	SC-39
TOSHIBA	3-3B1A

Weight : 0.42 g

MAXIMUM RATINGS

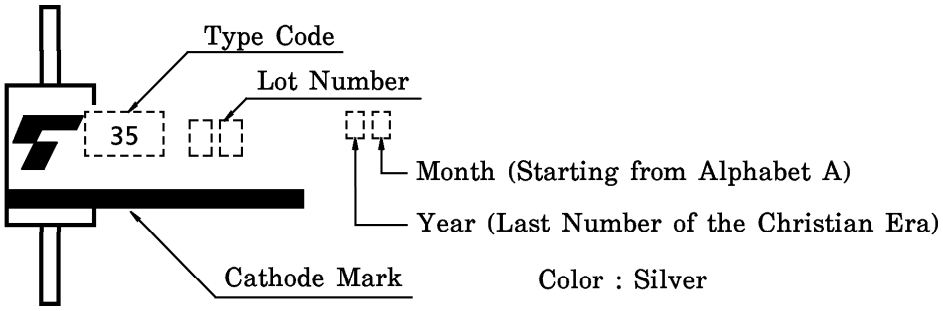
CHARACTERISTIC		SYMBOL	RATINGS	UNIT
Repetitive Peak Reverse Voltage	1S1834	V_{RRM}	400	V
	1S1835		600	
Reverse Voltage (DC)	1S1834	V_R	300	V
	1S1835		500	
Average Forward Current (Ta = 50°C)		$I_{F(AV)}$	1.0	A
Peak One Cycle Surge Forward Current (Non Repetitive)		I_{FSM}	60 (50 Hz)	A
			66 (60 Hz)	
Junction Temperature		T_j	−40~125	°C
Storage Temperature Range		T_{stg}	−40~125	°C

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage	V_{FM}	I_{FM} = 1.5 A	—	—	1.2	V
Repetitive Peak Reverse Current	$I_{RRM(1)}$	V_{RRM} = Rated	—	—	10	μA
	$I_{RRM(2)}$	V_{RRM} = Rated, T_j = 125°C	—	—	500	
Reverse Recovery Time	$t_{rr(1)}$	I_F = 20 mA, I_R = 1 mA	—	—	1.5	μs
	$t_{rr(2)}$	I_F = 20 mA, I_R = 20 mA	—	—	0.35	
Forward Recovery Voltage	V_{fr}	I_F = 0.1 A, t_r = 100 ns, t_w = 5 μs	—	—	6	V

(Note 1) : Lead diameter not controlled in this zone to allow for flash, lead finish build-up, and minor irregularities other than slugs.
(Note 2) : Soldering : 5 mm is the minimum to be kept between case and soldering part.
(Note 3) : Lead bending : 5 mm is the minimum to be kept from the case when bend the lead wire.

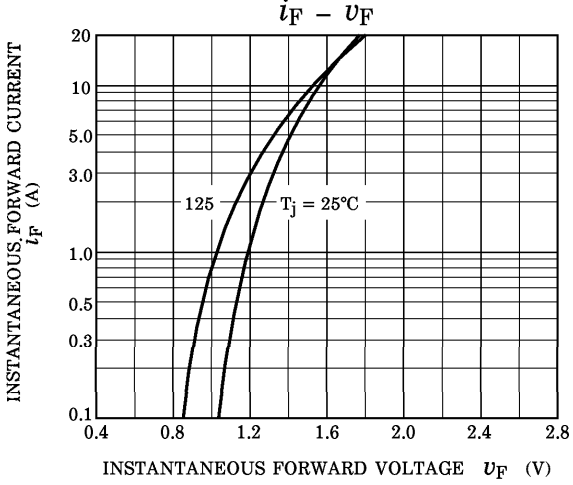
MARKING



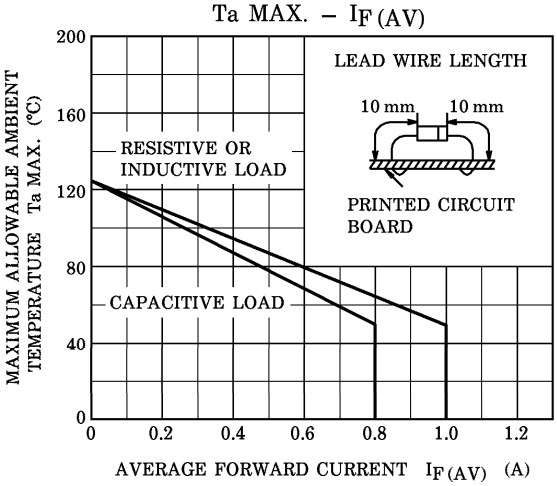
Color : Silver

CODE	TYPE
34	1S1834
35	1S1835

$i_F - v_F$



Ta MAX. – $I_{F(AV)}$



SURGE FORWARD CURRENT (NON-REPETITIVE)