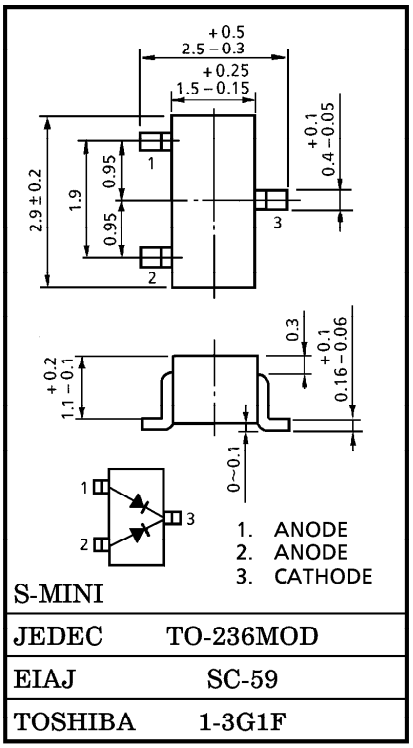
TOSHIBA DIODE SILICON EPITAXIAL SCHOTTKY BARRIER TYPE

1SS392

LOW VOLTAGE HIGH SPEED SWITCHING

Unit in mm

- Low Forward Voltage : $V_F(3) = 0.54V$ (TYP.)
- Low Reverse Current : $I_R = 5\mu A$ (MAX.)
- Small Package : SC−59



S-MINI	
JEDEC	TO-236MOD
EIAJ	SC-59
TOSHIBA	1-3G1F

Weight : 0.012g

MAXIMUM RATINGS (Ta = 25°C)

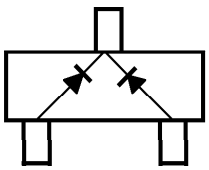
CHARACTERISTIC	SYMBOL	RATING	UNIT
Maximum (Peak) Reverse Voltage	V_{RM}	45	V
Reverse Voltage	V_R	40	V
Maximum (Peak) Forward Current	I_{FM}	300*	mA
Average Forward Current	I_O	100*	mA
Surge Current (10ms)	I_{FSM}	1*	A
Power Dissipation	P	150	mW
Junction Temperature	T_j	125	°C
Storage Temperature Range	T_{stg}	−55~125	°C
Operating Temperature Range	T_{opr}	−40~100	°C

* : Unit Rating. Total Rating = Unit Rating × 1.5

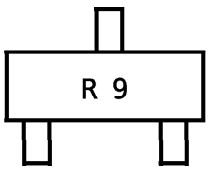
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	$V_F(1)$	$I_F = 1mA$	—	0.28	—	V
	$V_F(2)$	$I_F = 10mA$	—	0.36	—	
	$V_F(3)$	$I_F = 100mA$	—	0.54	0.60	
Reverse Current	I_R	$V_R = 40V$	—	—	5	μA
Total Capacitance	C_T	$V_R = 0$, f = 1MHz	—	18	25	pF

EQUIVALENT CIRCUIT (TOP VIEW)



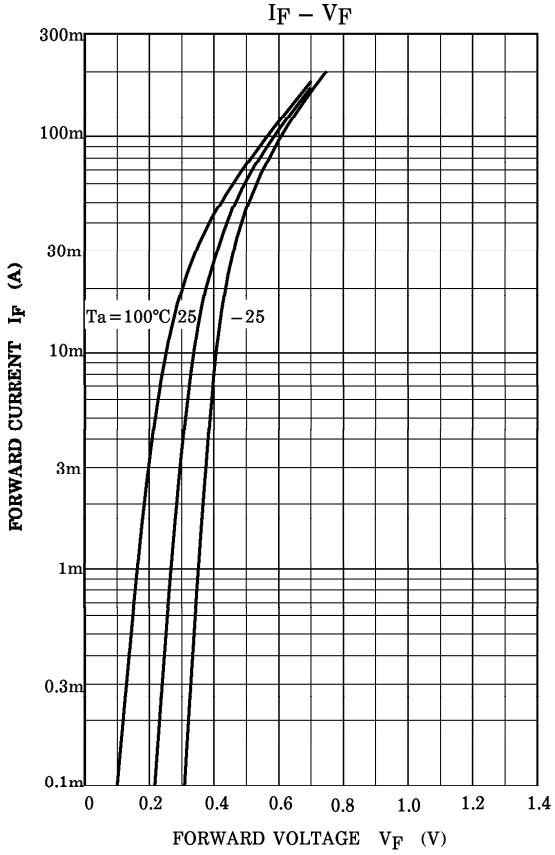
MARKING



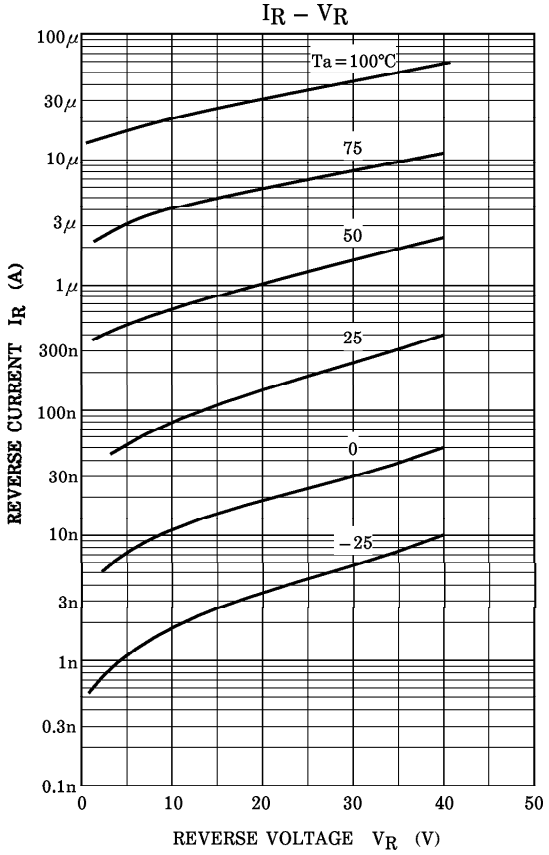
961001EAA2

- TOSHIBA is continually working to improve the quality and the reliability of its products. Nevertheless, semiconductor devices in general can malfunction or fail due to their inherent electrical sensitivity and vulnerability to physical stress. It is the responsibility of the buyer, when utilizing TOSHIBA products, to observe standards of safety, and to avoid situations in which a malfunction or failure of a TOSHIBA product could cause loss of human life, bodily injury or damage to property. In developing your designs, please ensure that TOSHIBA products are used within specified operating ranges as set forth in the most recent products specifications. Also, please keep in mind the precautions and conditions set forth in the TOSHIBA Semiconductor Reliability Handbook.
- The information contained herein is presented only as a guide for the applications of our products. No responsibility is assumed by TOSHIBA CORPORATION for any infringements of intellectual property or other rights of the third parties which may result from its use. No license is granted by implication or otherwise under any intellectual property or other rights of TOSHIBA CORPORATION or others.
- The information contained herein is subject to change without notice.

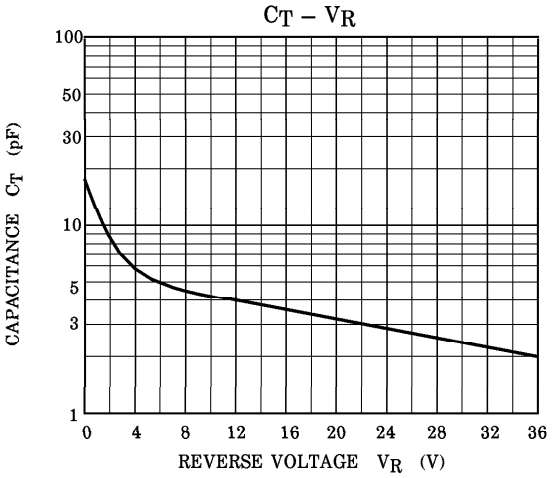
$I_F - V_F$



$I_R - V_R$



$C_T - V_R$



P – Ta

