TOSHIBA CRH01

# TOSHIBA HIGH EFFICIENCY RECTIFIER SILICON EPITAXIAL TYPE

# C R H 0 1

#### SWITCHING TYPE POWER SUPPLY APPLICATIONS

Repetitive Peak Reverse Voltage : V<sub>RRM</sub> = 200 V

Average Forward Current :  $I_{F(AV)} = 1.0 A$ 

:  $V_{FM} = 0.98 V \text{ (Max.)}$ Low Forward Voltage

Very Fast Reverse-Recovery Time :  $t_{rr} = 35 \text{ ns}$  (Max.)

: S-FLAT<sup>TM</sup> Small & Thin Package

(Toshiba Package Name)

## **MAXIMUM RATINGS**

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	$v_{RRM}$	200	V
Average Forward Current	I <sub>F (AV)</sub>	1.0	A
Peak One Cycle Surge Forward Current (Non-Repetitive)	$I_{FSM}$	15 (50 Hz)	A
Junction Temperature	$T_{j}$	-40~150	°C
Storage Temperature Range	$T_{ m stg}$	-40~150	°C

3.5 ± 0.2  $2.6 \pm 0.1$  $0.9 \pm 0.1$ 1.6 <sup>+0.2</sup> 1. ANODE 2. CATHODE **JEDEC EIAJ TOSHIBA** 3-2A1A

Unit in mm

Weight: 0.013 g

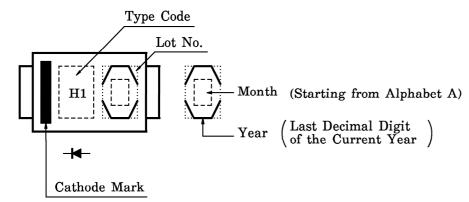
#### ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage	V <sub>FM (1)</sub>	$I_{\text{FM}} = 0.1 \text{A}$	_	0.71	_	V
	V <sub>FM (2)</sub>	$I_{\text{FM}} = 0.7 \text{A}$	_	0.86	_	
	V <sub>FM (3)</sub>	$I_{\text{FM}} = 1.0 \text{ A}$	_	0.90	0.98	
Repetitive Peak Reverse Current	I <sub>RRM</sub>	$V_{RRM} = 200 V$	_	_	10	$\mu$ <b>A</b>
Reverse Recovery Time	t <sub>rr</sub>	$I_{\rm F} = 1  { m A,  di / dt} = -30  { m A/  \mu s}$	_	_	35	ns
Forward Recovery Time	$t_{fr}$	$I_{\mathbf{F}} = 1 \text{ A}$	_	_	100	ns
Thermal Resistance R <sub>th (j-a</sub>	Rut (* -)	On ceramic substrate	_	_	65	°C/W
	trn (j-a)	On glass-epoxy substrate	_	_	130	

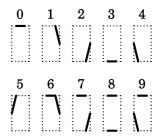
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## MARKING



# FOLLOWING INDICATES THE DATE OF MANUFACTURE



## STANDARD SOLDERING PAD

Unit: mm

