

TOSHIBA

CMS05

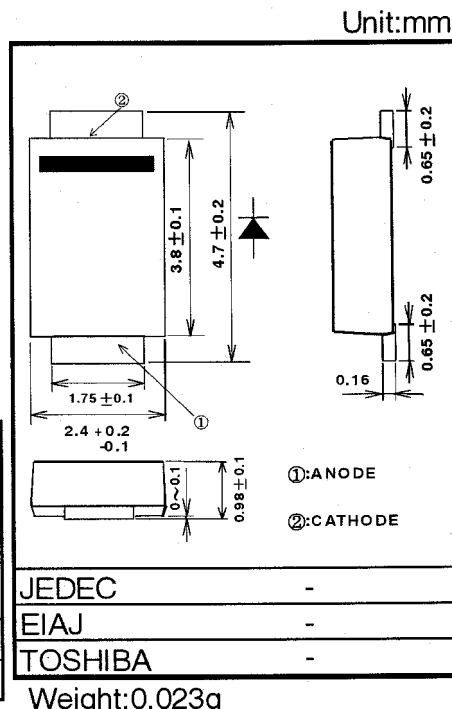
TOSHIBA SCHOTTKY BARRIER RECTIFIER SCHOTTKY BARRIER TYPE

CMS05

SWITCHING MODE POWER SUPPLY APPLICATIONS
PORTABLE EQUIPMENT BATTERY APPLICATIONS

- Forward Voltage : $V_{FM}=0.45V(\text{Max.})$
- Average Forward Current : $I_{F(AV)}=5.0A$
- Repetitive Peak Reverse Voltage : $V_{RRM}=30V$
- Small & Thin Package
M-FLAT™ (Toshiba package name)
- MAXIMUM RATINGS

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Average Forward Current	$I_{F(AV)}$	5.0 ($T_I=100^\circ\text{C}$)	A
Peak One Cycle Surge Forward Current(Non-Repetitive)	I_{FSM}	70(50Hz)	A
Junction Temperature	T_J	-40~150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-40~150	$^\circ\text{C}$



● ELECTRICAL CHARACTERISTICS($T_a=25^\circ\text{C}$)

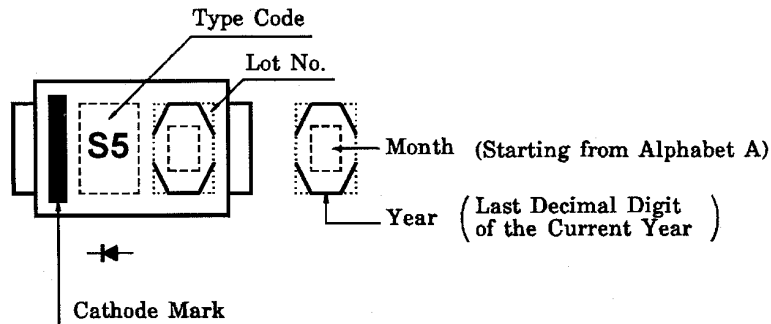
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage	$V_{FM(1)}$	$I_{FM}=1.0A$	-	0.35	-	V
	$V_{FM(2)}$	$I_{FM}=3.0A$	-	0.40	-	V
	$V_{FM(3)}$	$I_{FM}=5.0A$	-	0.43	0.45	V
Repetitive Peak Reverse Current	I_{RRM}	$V_{RRM}=5.0V$	-	6.0	-	μA
	I_{RRM}	$V_{RRM}=30V$	-	65	800	μA
Junction Capacitance	C_j	$V_R=10V, f=1.0MHz$	-	330	-	pF
Thermal Resistance	$R_{th(j-a)}$	On ceramic substrate (Soldering Land 2mmx2mm)	-	-	60	$^\circ\text{C/W}$
		On glass-epoxy substrate (Soldering Land 6mmx6mm)	-	-	135	$^\circ\text{C/W}$
	$R_{th(j-l)}$	-	-	-	16	$^\circ\text{C/W}$

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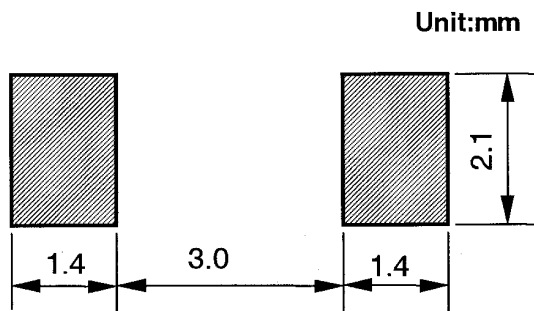
MARKING



FOLLOWING INDICATES THE DATE OF MANUFACTURE

0	1	2	3	4
5	6	7	8	9

Standard Soldering pad



HANDLING PRECAUTION

Schottky barrier diodes are having large-reverse-current-leakage characteristic compare to the other rectifier products.

This current leakage and not proper operating temperature or voltage may cause thermal run.

Please take forward and reverse loss into consideration when you design

