TOSHIBA RECTIFIER SILICON DIFFUSED JUNCTION TYPE

U1BC44, U1GC44, U1JC44

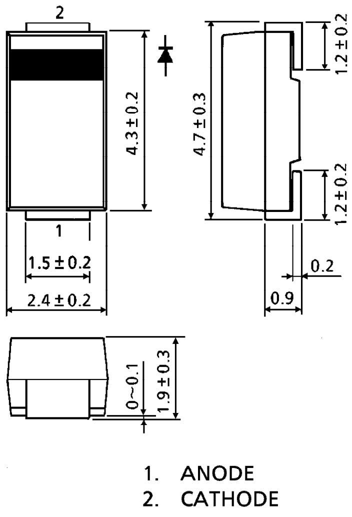
FOR HYBRID USE

- Average Forward Current : $I_{F(AV)} = 1.0A$
- Repetitive Peak Reverse Voltage : $V_{RRM} = 100 \sim 600V$
- Mini Plastic Mold Package

MAXIMUM RATINGS

CHARACTERISTIC		SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	U1BC44	V_{RRM}	100	V
	U1GC44		400	
	U1JC44		600	
Average Forward Current	On Ceramic Substrate	$I_{F(AV)}$	1.0 (Ta = 75°C)	A
	On Glass-epoxy Substrate		0.9 (Ta = 25°C)	
Peak One Cycle Surge Forward Current (Non-Repetitive)		I_{FSM}	30 (50Hz)	A
			33 (60Hz)	
Junction Temperature		T_j	−40~150	°C
Storage Temperature Range		T_{stg}	−40~150	°C

Unit in mm



JEDEC	—
EIAJ	—
TOSHIBA	3-4D1A

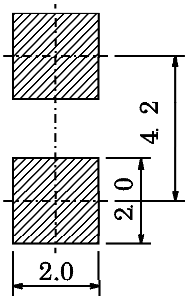
Weight : 0.06g

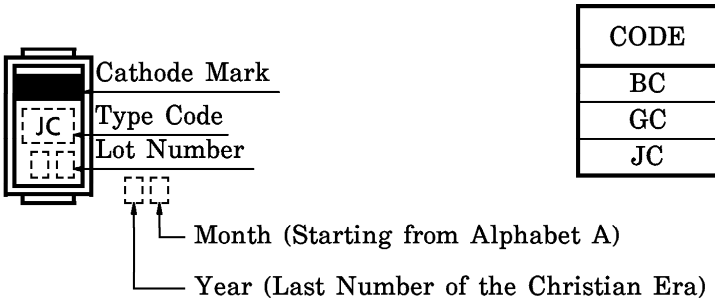
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage	V_{FM}	$I_{FM} = 1.0A$		—	—	1.2	V
Repetitive Peak Reverse Current	I_{RRM}	V_{RRM} = Rated		—	—	10	μA
Thermal Resistance	$R_{th(j-a)}$	DC	On ceramic substrate	—	—	60	°C / W
			On glass-epoxy substrate	—	—	120	

STANDARD SOLDERING PAD

Unit : mm





CODE	TYPE
BC	U1BC44
GC	U1GC44
JC	U1JC44

961001EAA2

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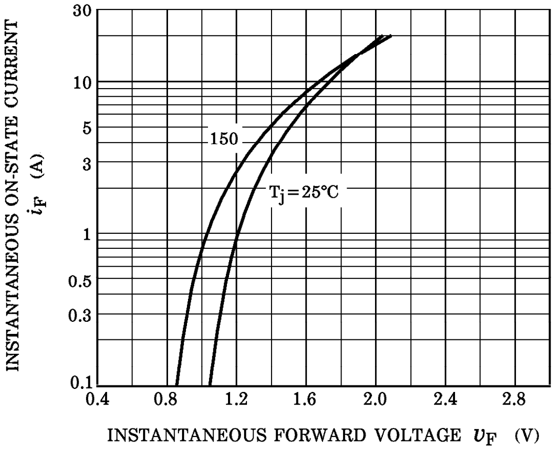
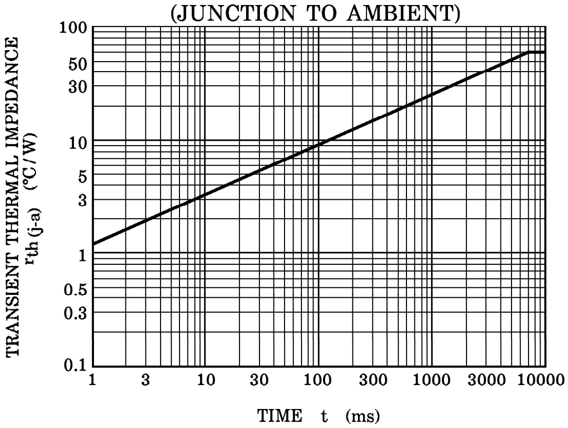
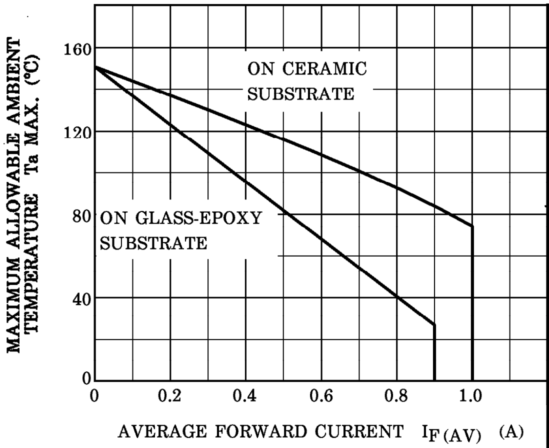
$i_F - v_F$



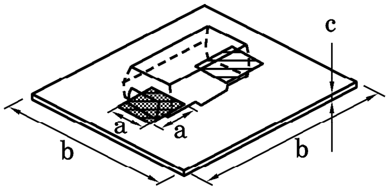
TRANSIENT THERMAL IMPEDANCE (JUNCTION TO AMBIENT)



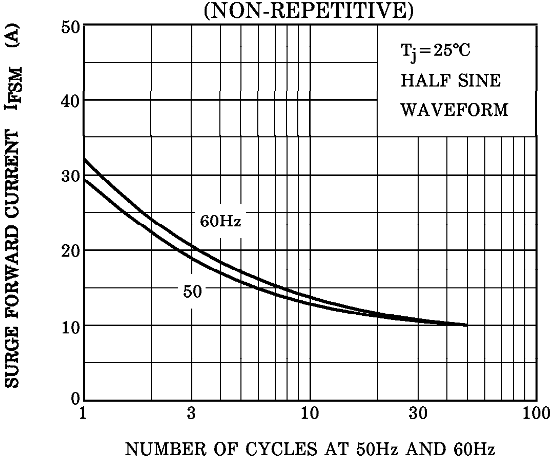
Ta MAX. – $I_{F\,(AV)}$



	ON CERAMIC SUBSTRATE	ON GLASS-EPOXY SUBSTRATE
Soldering land : a□	2mm□	6mm□
Substrate size : b□	50mm□	50mm□
Substrate thickness : c□	0.64t	1.6t



SURGE FORWARD CURRENT (NON-REPETITIVE)



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