

# **SEMICONDUCTOR** TECHNICAL DATA

### S10A2CIA

SUPER FAST RECOVERY RECTIFIER DIODE

SWITCHING MODE POWER SUPPLY APPLICATION CONVERTER & CHOPPER APPLICATION.

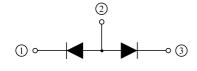
#### **FEATURES**

- · Super-Fast Recovery Time for High Efficiency.
- · Low Forward Voltage Drop, High Current Capability, and Low Power Loss.

#### APPLICATION

- · Switching Power Supply.
- · Home Appliances, Office Equipment.
- · Telecommunication, Factory Automation.

#### **POLARITY**



#### MILLIMETERS 10.0±0.3 $15.0 \pm 0.3$ $2.70 \pm 0.3$ D 0.76±0.09/-0.05 $\Phi$ 3.2+0.2 $3.0 \pm 0.3$ $12.0 \pm 0.3$ 0.5+0.1/-0.05 Н 13.6±0.5 $3.7\!\pm\!0.2$ 1.2+0.25/-0.1 M 1.5±0.25/-0.1 N $2.54 \pm 0.1$ Р $6.8 \pm 0.1$ 0 $4.5 \pm 0.2$ R $2.6 \pm 0.2$ 0.5 Typ 1. ANODE 2. CATHODE

#### MAXIMUM RATINGS (Ta=25

POLARITY					1. ANODE 2. CATHODE 3. ANODE				
					TO-220IS				
MAXIMUM RATINGS (Ta=25 )  CHARACTERISTIC SYMBOL RALLY VIT  Maximum Reverse Voltage V <sub>RM</sub> 200									
CHARACTERISTIC	SYMBOL	RALIY	JT						
Maximum Reverse Voltage	V <sub>RM</sub>	200	7//		SPA				
Average Output Rectified Current (Tc=125 ) (Note1)	I <sub>O</sub>	10	A		0-42/1				
Peak One Cycle Surge Forward	$I_{FSM}$	50 (50Hz)	A						
Current (Non-Repetitive)	1FSM	60 (60Hz)	A						
Junction Temperature	T <sub>j</sub>	-40~150							
Storage Temperature Range	T <sub>stg</sub>	-40~150							
(Note1): Average forward current of c	entertap full w	ave connection	n.						

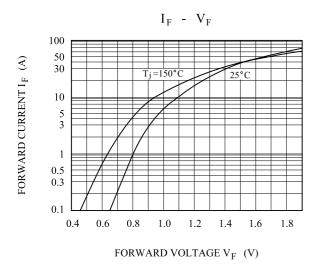
(Note1): Average forward current of centertap full wave connection.

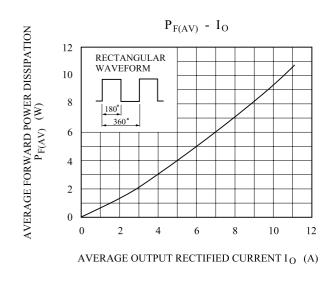
#### ELECTRICAL CHARACTERISTICS (Ta=25)

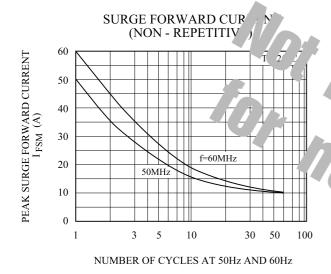
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CHARACTERISTIC SYMBOL		TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Peak Forward Voltage	(Note2)	$V_{\rm FM}$	I <sub>FM</sub> =5A	-	-	0.98	V
Reverse Current	(Note2)	$I_{RM}$	V <sub>RM</sub> =Rated	-	-	10	μA
Reverse Recovery Time	(Note2)	t <sub>rr</sub>	$I_F = I_R = 100 \text{mA}$	-	-	100	ns
Thermal Resistance	(Note2)	R <sub>th(j-c)</sub>	Junction to Case	-	-	3.6	/W

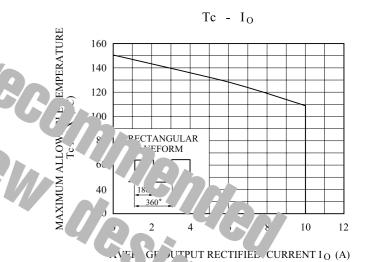
(Note2): A Value of one cell.

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