

RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

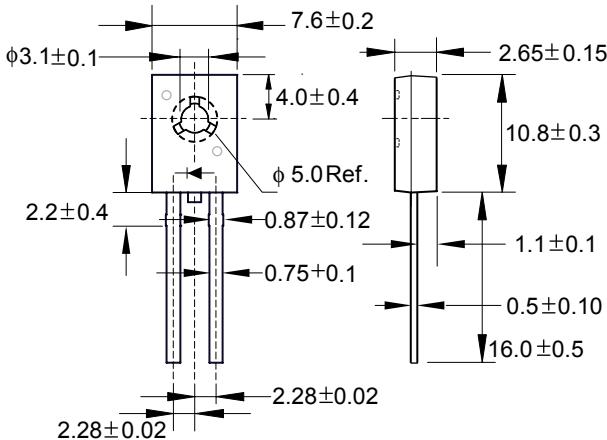
TO-126A

## FEATURES

- \* Low forward voltage drop
  - \* High current capability
  - \* High reliability
  - \* High surge current capability
  - \* Epitaxial construction

## **MECHANICAL DATA**

- \* Case: Molded plastic
  - \* Epoxy: UL 94V-0 rate flame retardant
  - \* Lead: Lead solderable per MIL-STD-202,  
method 208 guaranteed
  - \* Polarity: As Marked
  - \* Mounting position: Any
  - \* Weight: 1.7 grams(Aproximately)



Dimensions in millimeter

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.  
Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

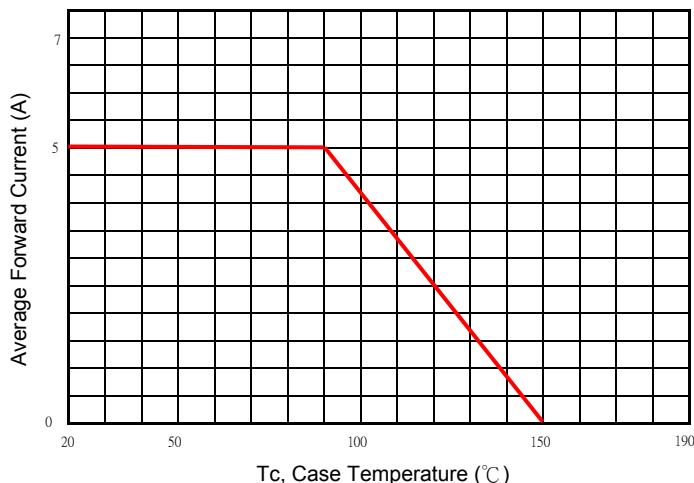
TYPE NUMBER	SYMBOL	SDR5200S	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	200	V
Working Peak Reverse Voltage	V <sub>RSM</sub>	200	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	200	V
Maximum Average Forward Rectified Current	I <sub>F</sub>	5	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	100	A
Maximum Instantaneous Forward Voltage (I <sub>F</sub> = 5 Amps, T <sub>F</sub> = 25°C, per leg)	V <sub>F</sub>	0.90	V
Maximum Instantaneous Forward Voltage (I <sub>F</sub> = 5 Amps, T <sub>F</sub> = 125°C, per leg)		0.78	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	0.02 5	mA
Typical Junction Capacitance (Note1)	C <sub>J</sub>	120	pF
Typical Thermal Resistance □(Note 2)	R <sub>θJA</sub>	45	°C/W
Voltage Rate Of Change (Rated V <sub>R</sub> )	dv/dt	10000	V/us
Operating Temperature Range	T <sub>J</sub>	-50 ~ +150	°C
Storage Temperature Range	T <sub>STG</sub>	-65 ~ +175	°C

## NOTES:

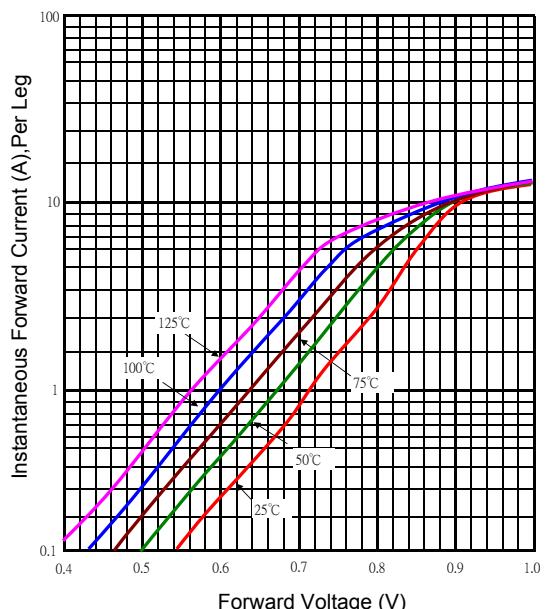
1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
  2. Thermal Resistance, Junction to Case

#### RATING AND CHARACTERISTIC CURVES

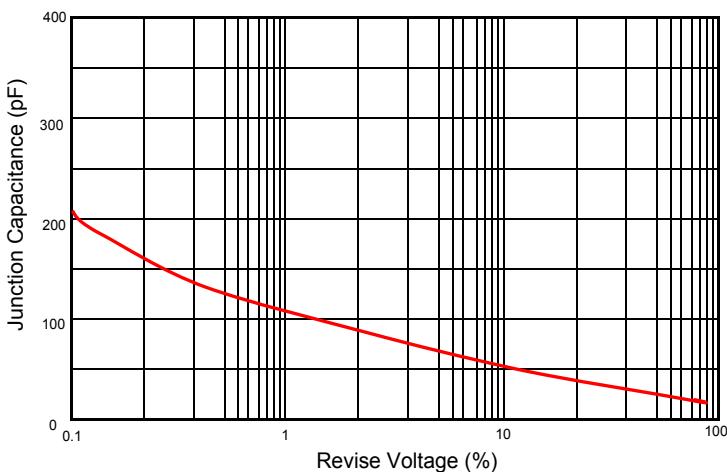
Typical Forward Current Derating Curve



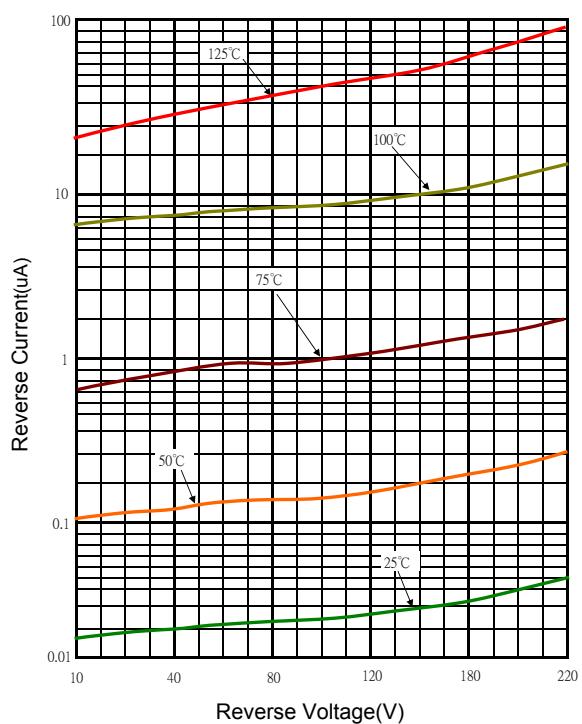
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non-Repetitive Forward Surge Current

