



# STR30100CT

## Low $V_F$ Schottky Barrier Rectifier

**Voltage** 100 V **Current** 30 A

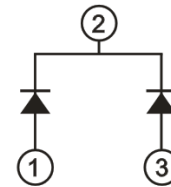
### Features

- Low power loss, high efficiency
- High surge current capability
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

### Mechanical Data

- Case : TO-220AB Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0667 ounces, 1.8904 grams

TO-220AB



## Maximum Ratings and Thermal Characteristics (T<sub>A</sub> = 25 °C unless otherwise noted)

PARAMETER		SYMBOL	LIMIT	UNITS
Maximum Repetitive Peak Reverse Voltage		V <sub>RRM</sub>	100	V
Maximum RMS Voltage		V <sub>RMS</sub>	70	V
Maximum DC Blocking Voltage		V <sub>DC</sub>	100	V
Maximum Average Forward Current	per device	I <sub>F(AV)</sub>	30	A
	per diode		15	
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load Per Diode		I <sub>FSM</sub>	200	A
Typical Junction Capacitance Measured at 1 MHz And Applied V <sub>R</sub> = 4 V		C <sub>J</sub>	800	pF
Typical Thermal Resistance	(Note 1)	R <sub>θJC</sub>	2	°C/W
	(Note 1)	R <sub>θJL</sub>	2	
Operating Junction Temperature Range		T <sub>J</sub>	-55~150	°C
Storage Temperature Range		T <sub>STG</sub>	-55~150	°C



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## Electrical Characteristics ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage Per Diode	$V_F$	$I_F = 1\text{ A}, T_J = 25^\circ\text{C}$	-	0.39	-	V
		$I_F = 5\text{ A}, T_J = 25^\circ\text{C}$	-	0.51	-	
		$I_F = 15\text{ A}, T_J = 25^\circ\text{C}$	-	-	0.78	
		$I_F = 1\text{ A}, T_J = 125^\circ\text{C}$	-	0.27	-	
		$I_F = 5\text{ A}, T_J = 125^\circ\text{C}$	-	0.47	-	
		$I_F = 15\text{ A}, T_J = 125^\circ\text{C}$	-	0.67	-	
Reverse Current Per Diode <sup>(Note 2)</sup>	$I_R$	$V_R = 80\text{ V}, T_J = 25^\circ\text{C}$	-	5	-	$\mu\text{A}$
		$V_R = 100\text{ V}, T_J = 25^\circ\text{C}$	-	-	50	
		$V_R = 100\text{ V}, T_J = 125^\circ\text{C}$	-	6.5	-	mA

NOTES :

1. Device mounted on a infinite heatsink.
2. Short duration pulse test used to minimize self-heating effect.



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## TYPICAL CHARACTERISTIC CURVES

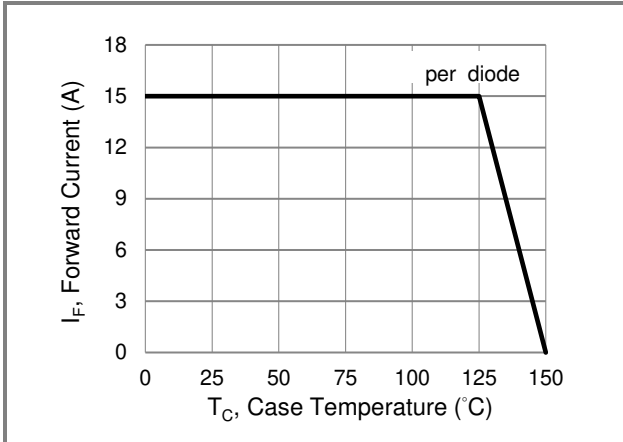


Fig.1 Forward Current Derating Curve

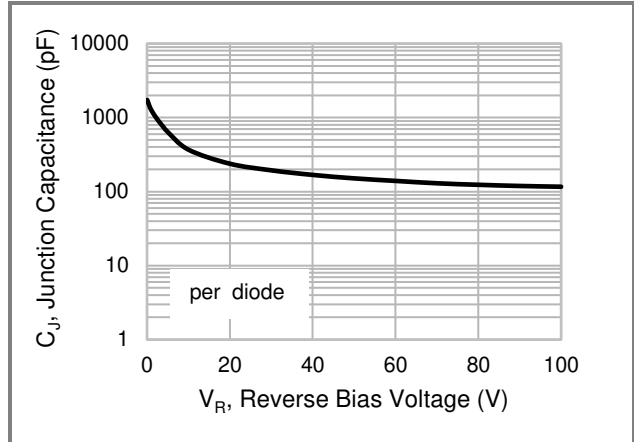


Fig.2 Typical Junction Capacitance

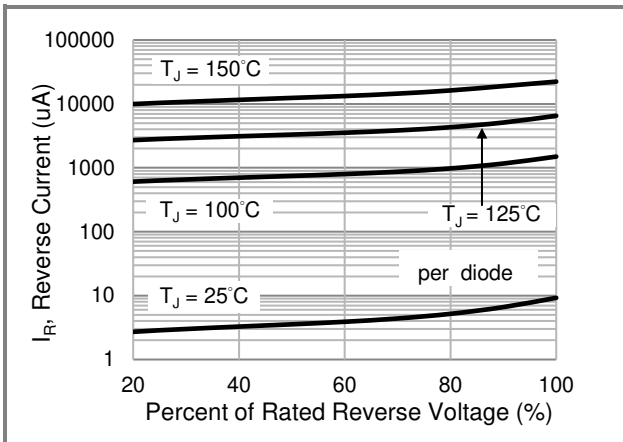


Fig.3 Typical Reverse Characteristics

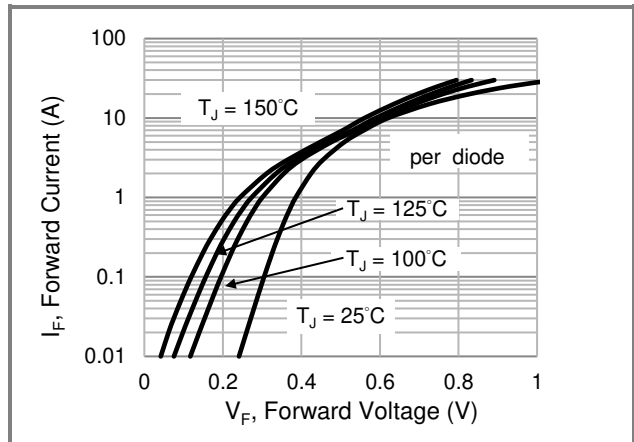


Fig.4 Typical Forward Characteristics

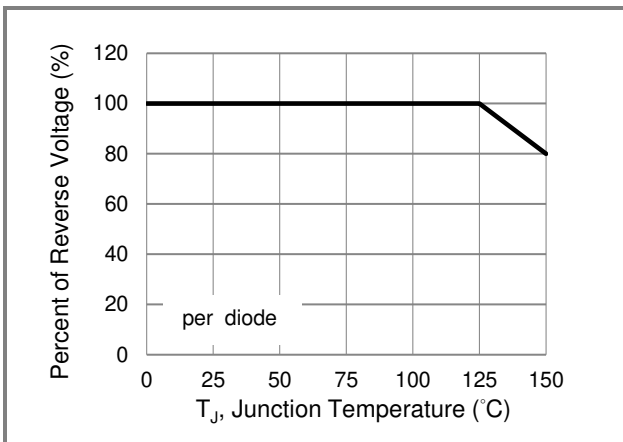


Fig.5 Operating Temperature Derating Curve

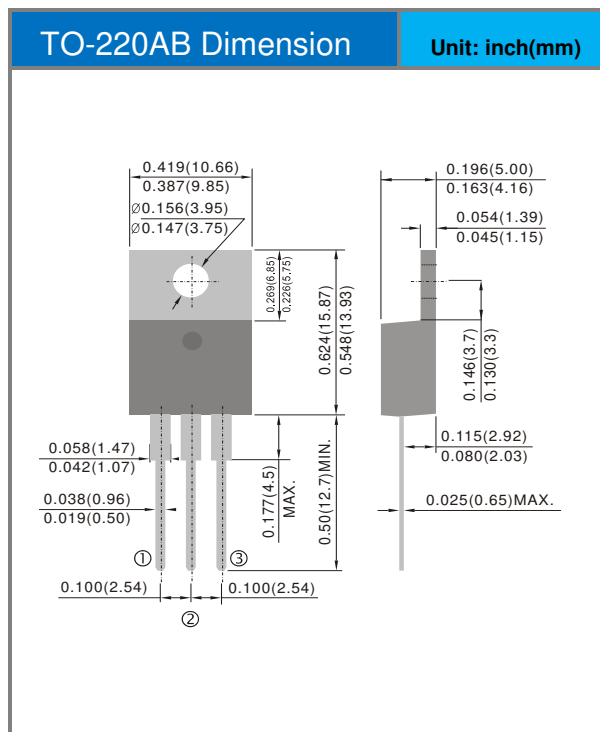


# STR30100CT

Part No. Packing Code Version

Part No. Packing Code	Package Type	Packing Type	Marking	Version
STR30100CT_T0_00001	TO-220AB	50pcs / Tube	STR30100CT	Halogen free RoHS compliant

## Packaging Information





## STR30100CT

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