

STR40100CT

Low V_F Schottky Barrier Rectifier

Voltage

100 V

Current

40 A

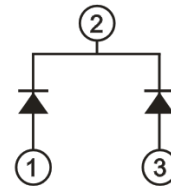
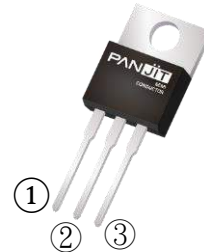
Features

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

PARAMETER		SYMBOL	LIMIT	UNITS
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	100	V
Maximum RMS Voltage		V_{RMS}	70	V
Maximum DC Blocking Voltage		V_{DC}	100	V
Maximum Average Forward Current	per device per diode	$I_{F(AV)}$	40 20	A
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load Per Diode		I_{FSM}	200	A
Typical Junction Capacitance Measured at 1 MHZ And Applied $V_R = 4\text{ V}$		C_J	820	pF
Typical Thermal Resistance	(Note 1)	$R_{\theta JC}$	2	$^\circ\text{C/W}$
	(Note 1)	$R_{\theta JL}$	2	
Operating Junction Temperature Range		T_J	-55~150	$^\circ\text{C}$
Storage Temperature Range		T_{STG}	-55~150	$^\circ\text{C}$



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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	$I_F = 1\text{ A}, T_J = 25^\circ\text{C}$	-	0.38	-	V
		$I_F = 10\text{ A}, T_J = 25^\circ\text{C}$	-	0.58	-	
		$I_F = 20\text{ A}, T_J = 25^\circ\text{C}$	-	-	0.81	
		$I_F = 1\text{ A}, T_J = 125^\circ\text{C}$	-	0.26	-	
		$I_F = 10\text{ A}, T_J = 125^\circ\text{C}$	-	0.55	-	
		$I_F = 20\text{ A}, T_J = 125^\circ\text{C}$	-	0.68	-	
Reverse Current Per Diode ^(Note 2)	I_R	$V_R = 80\text{ V}, T_J = 25^\circ\text{C}$	-	7	-	μA
		$V_R = 100\text{ V}, T_J = 25^\circ\text{C}$	-	-	100	
		$V_R = 100\text{ V}, T_J = 125^\circ\text{C}$	-	9	-	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

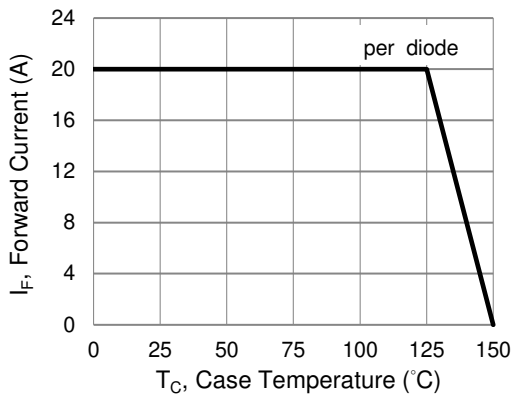


Fig.1 Forward Current Derating Curve

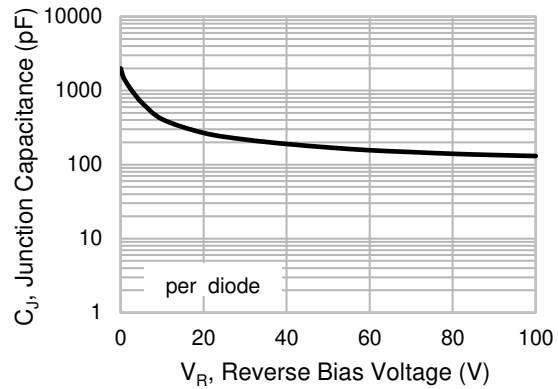


Fig.2 Typical Junction Capacitance

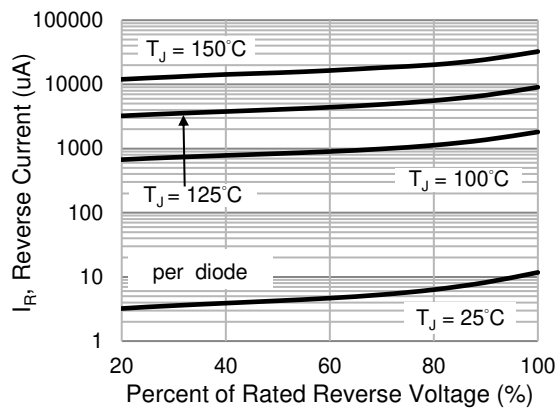


Fig.3 Typical Reverse Characteristics

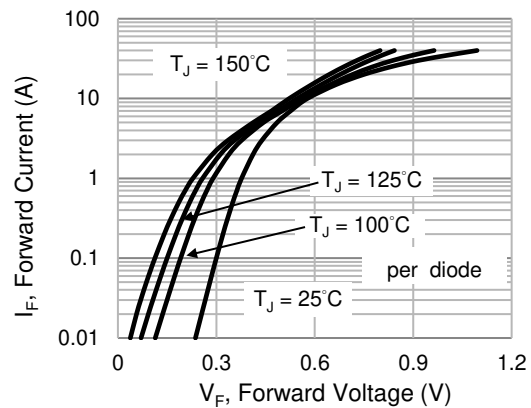


Fig.4 Typical Forward Characteristics

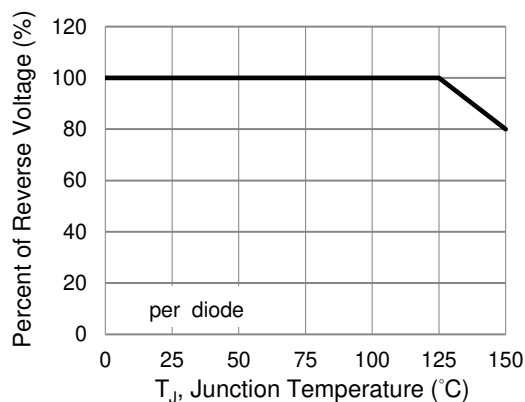


Fig.5 Operating Temperature Derating Curve

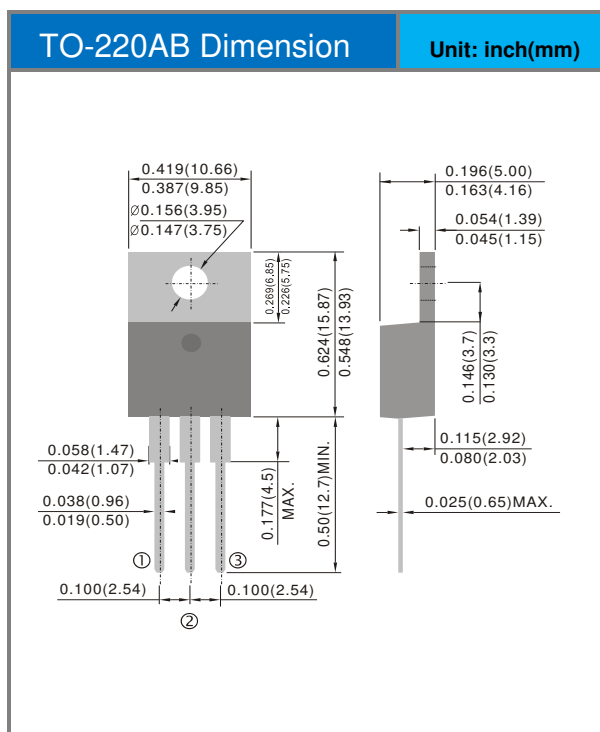


STR40100CT

Part No. Packing Code Version

Part No. Packing Code	Package Type	Packing Type	Marking	Version
STR40100CT_T0_00001	TO-220AB	50pcs / Tube	STR40100CT	Halogen free RoHS compliant

Packaging Information





STR40100CT

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