



STR40100LCT

Low V_f Schottky Barrier Rectifier

Voltage

100 V

Current

40 A

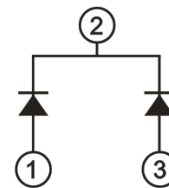
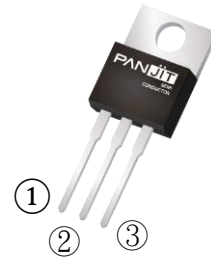
Features

- Low forward voltage drop
- 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 °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	I _{F(AV)}	40	A
	per diode		20	
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load Per Diode		I _{FSM}	210	A
Typical Junction Capacitance Measured at 1 MHz And Applied V _R = 4 V		C _J	1400	pF
Typical Thermal Resistance ^(Note 1)		R _{θJC}	2	°C/W
		R _{θJL}	2	
Operating Junction Temperature Range		T _J	-55~150	°C
Storage Temperature Range		T _{STG}	-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	$I_F = 1\text{ A}, T_J = 25^\circ\text{C}$	-	0.37	-	V
		$I_F = 10\text{ A}, T_J = 25^\circ\text{C}$	-	0.53	-	
		$I_F = 20\text{ A}, T_J = 25^\circ\text{C}$	-	-	0.72	
		$I_F = 1\text{ A}, T_J = 125^\circ\text{C}$	-	0.24	-	
		$I_F = 10\text{ A}, T_J = 125^\circ\text{C}$	-	0.5	-	
		$I_F = 20\text{ A}, T_J = 125^\circ\text{C}$	-	0.64	-	
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	
		$V_R = 100\text{ V}, T_J = 125^\circ\text{C}$	-	11	-	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

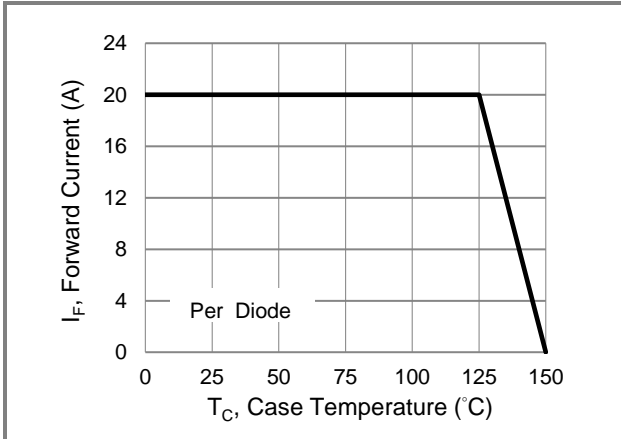


Fig.1 Forward Current Derating Curve

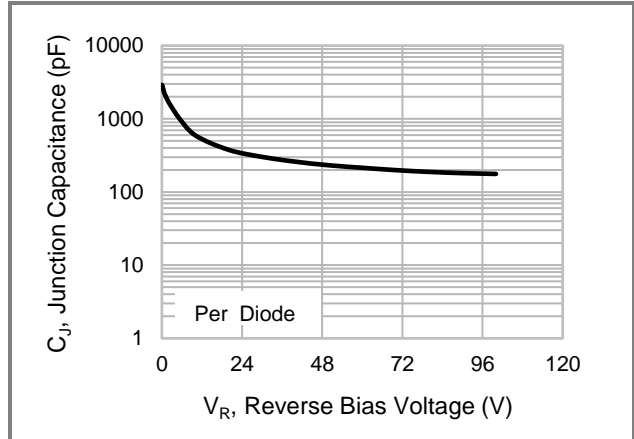


Fig.2 Typical Junction Capacitance

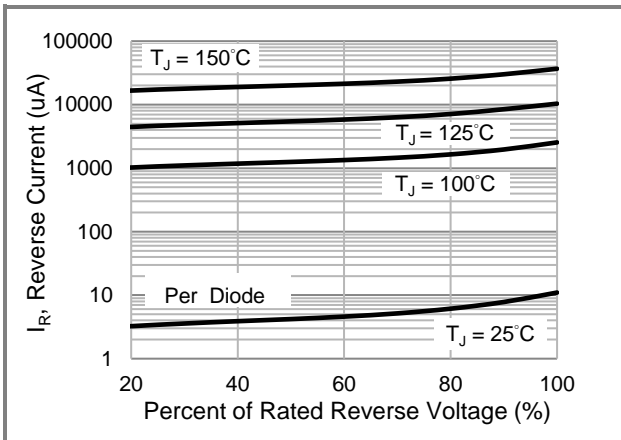


Fig.3 Typical Reverse Characteristics

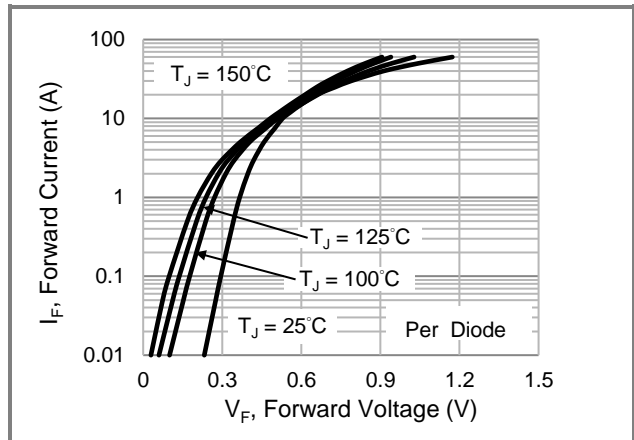


Fig.4 Typical Forward Characteristics

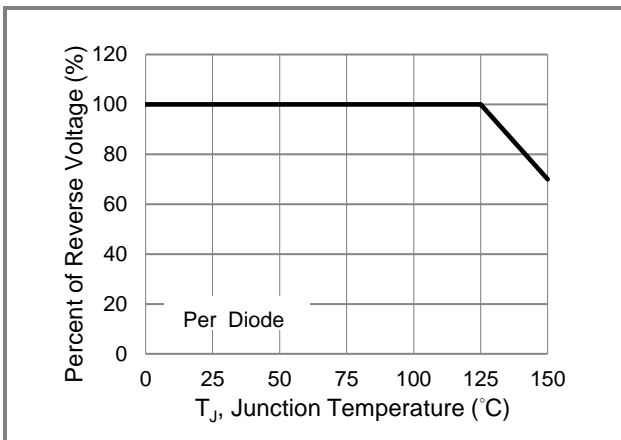


Fig.5 Operating Temperature Derating Curve

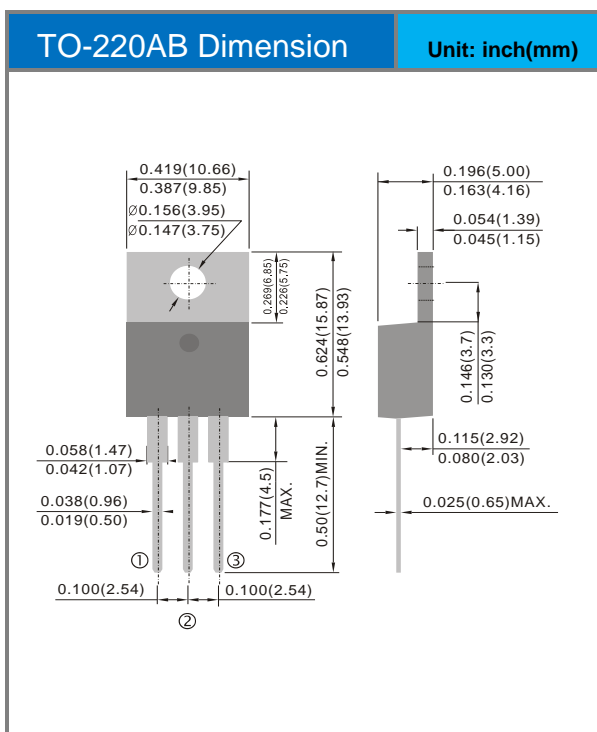


STR40100LCT

Part No. Packing Code Version

Part No. Packing Code	Package Type	Packing Type	Marking	Version
STR40100LCT_T0_00001	TO-220AB	50pcs / Tube	STR40100LCT	Halogen free RoHS compliant

Packaging Information





STR40100LCT

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