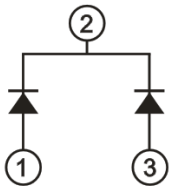
STR40100LCT

Low V_F Schottky Barrier Rectifier

Voltage	100 V	Current	40 A

TO-220AB



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

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 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}	210	A
Typical Junction Capacitance Measured at 1 MHZ And Applied V_R = 4 V		C_J	1400	pF
Typical Thermal Resistance(Note 1)		$R_{\theta JC}$ $R_{\theta JL}$	2 2	°C/W
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 °C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage Per Diode	V_F	I_F = 1 A, T_J = 25 °C	-	0.37	-	V
		I_F = 10 A, T_J = 25 °C	-	0.53	-	
		I_F = 20 A, T_J = 25 °C	-	-	0.72	
		I_F = 1 A, T_J = 125 °C	-	0.24	-	
		I_F = 10 A, T_J = 125 °C	-	0.5	-	
		I_F = 20 A, T_J = 125 °C	-	0.64	-	
Reverse Current Per Diode(Note 2)	I_R	V_R = 80 V, T_J = 25 °C	-	7	-	uA
		V_R = 100 V, T_J = 25 °C	-	-	100	
		V_R = 100V, T_J= 125 °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

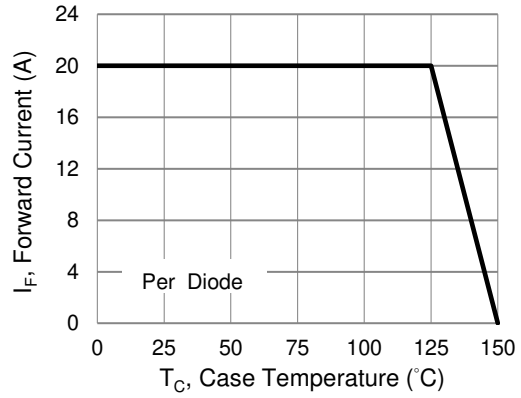

Fig.1 Forward Current Derating Curve

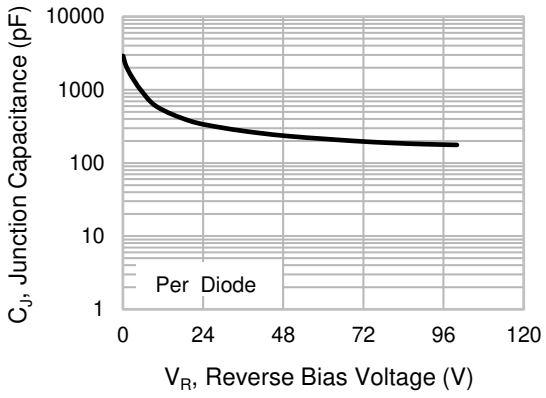

Fig.2 Typical Junction Capacitance

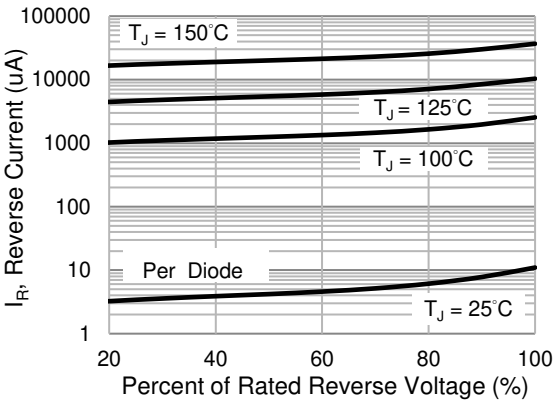

Fig.3 Typical Reverse Characteristics

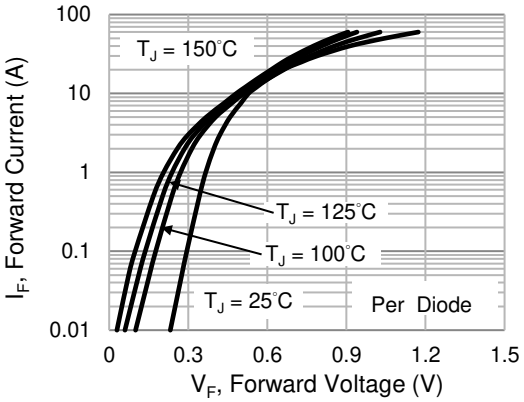

Fig.4 Typical Forward Characteristics

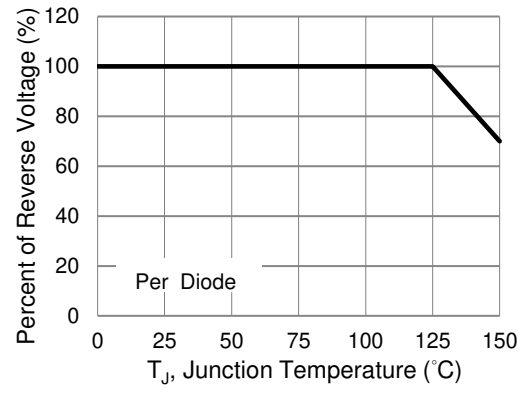

Fig.5 Operating Temperature Derating Curve

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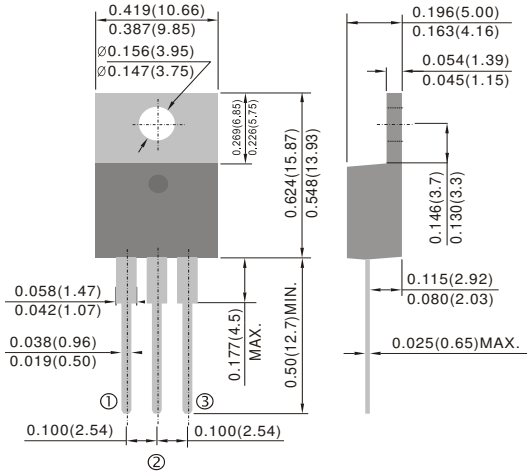
Part No. Packing Code Version

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

Packaging Information

TO-220AB Dimension | Unit: inch(mm)



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