

Low VF Dual Schottky Barrier Rectifier

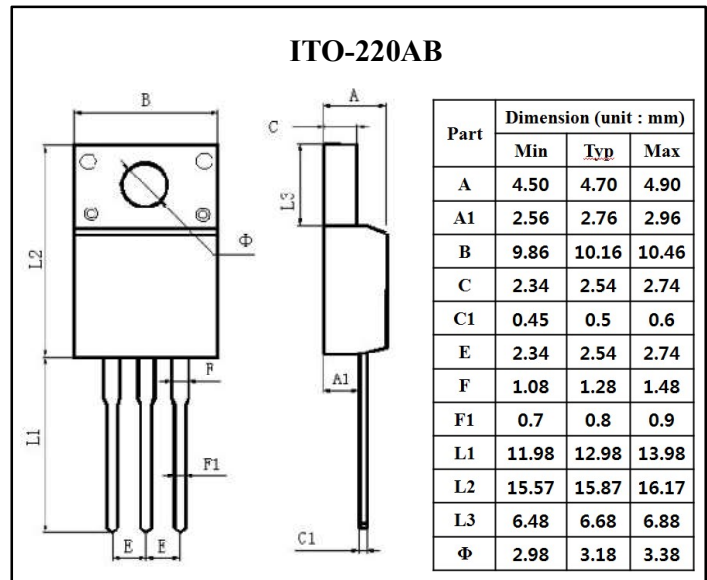
Reverse Voltage 100 Volts Forward Current 40 Amperes

Features

- High current capability, low forward voltage.
- Excellent high temperature stability
- Low power loss, and high efficiency
- High forward surge capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.
- RoHS compliant

Mecanical Data

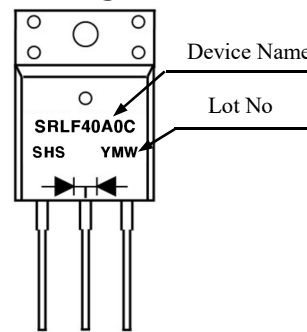
- Case :JEDEC ITO-220AB molded plastic package
- Termals: Matte tin plated,solderable per MIL-STD-750, Method 2026
- Molding Compound Flammability Rating:UL94-0
- Polarity:As marked
- Mounting position : Any
- Weight : 2.24 g approx.



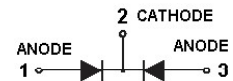
Application

- Switching mode power supply applications
- Portable equipment battery applications
- High frequency rectification
- DC/DC converter

Marking



Equivalent Circuit



Maximum Ratings

Parameter	Symbol	Rating	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS Voltage	V_{RMS}	75	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Maximum Average Forward Rectified Current at Total Device	$I_{F(AV)}$	40	A
Maximum Average Forward Rectified Current at Per Leg		20	A
Peak Forward Surge Current,8.3ms single half sine-wave	I_{FSM}	300	A
Peak Repetitive Reverse Current at $t_p=2\mu s$, 1kHz	I_{RRM}	1.0	A
Operating Junction Temperature Range	T_J	-50 to +150	°C
Storage Temperature Range	T_{STG}	-50 to +150	°C

Electrical Charateristics (Ta=25°C unless otherwise noted)

Characteristic	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Reverse Breakdown Voltage	V_R	100	-	-	V	$I_R=0.5mA$
Forward Voltage Drop	V_F	-	0.54	-	V	$I_F=10A$ at $T_a=25^\circ C$
		-	0.67	0.75	V	$I_F=20A$ at $T_a=25^\circ C$
		-	0.49	-	V	$I_F=10A$ at $T_a=125^\circ C$
		-	0.62	0.65	V	$I_F=20A$ at $T_a=125^\circ C$
Reverse Leakage Current	I_R	-	30	200	uA	$V_R=100V$, $T_a=25^\circ C$
		-	20	45	mA	$V_R=100V$, $T_a=125^\circ C$

Ratings and Characteristics Curves (Ta=25°C unless otherwise noted)

Fig.1 Forward Current Derating Curve

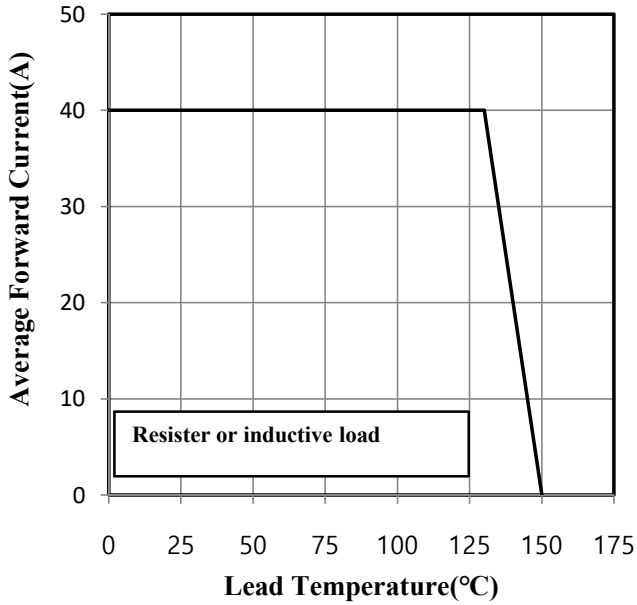


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

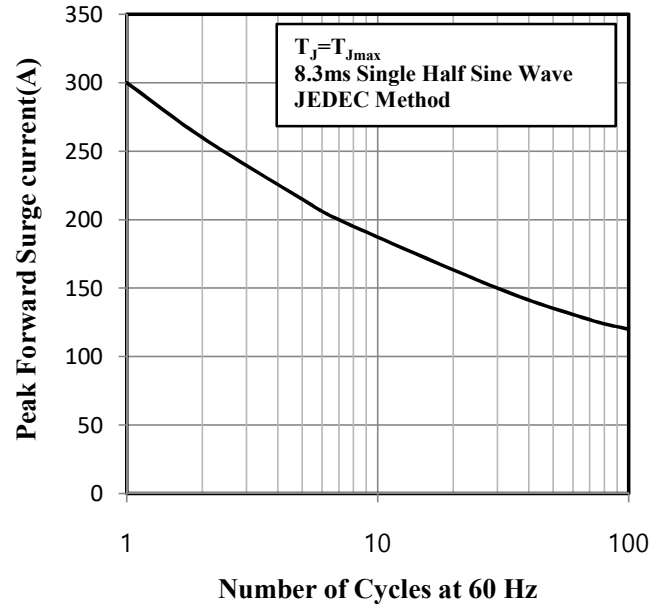


Fig.3 Typical Instantaneous Forward Characteristics

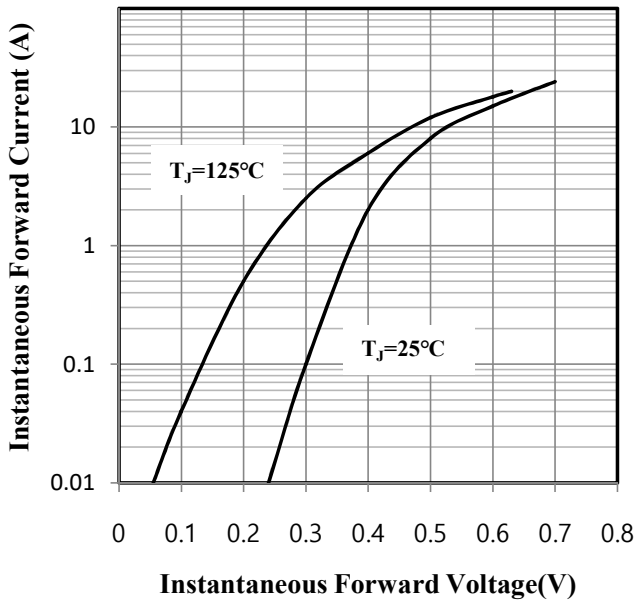


Fig.4 Typical Reverse Characteristics

