

SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE - 40 Volts
FORWARD CURRENT - 20 Amperes

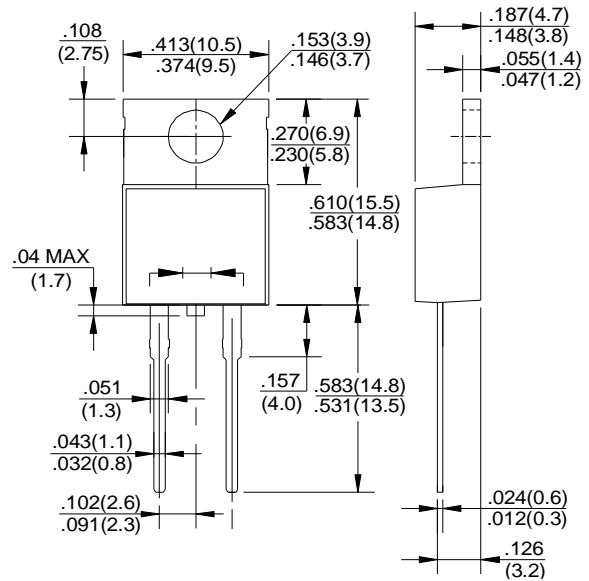
FEATURES

- Metal of silicon rectifier , majority carrier conduction
- Guard ring for transient protection
- Low power loss,high efficiency
- High current capability,low VF
- High surge capacity
- Plastic package has UL flammability classification 94V-0
- For use in low voltage,high frequency inverters,free wheeling,and polarity protection applications

MECHANICAL DATA

- Case: TO-220AC molded plastic
- Polarity: As marked on the body
- Mounting position :Any

TO-220AC



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	SDC2040C	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	40	V
Maximum RMS Voltage	V _{RMS}	28	V
Maximum DC Blocking Voltage	V _{DC}	40	V
Maximum Average Forward Rectified Current (See Fig.1) @T _C =95 °C	I _(AV)	20	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I _{FSM}	150	A
Peak Forward Voltage at 10A DC(Note1)	V _F	0.58	V
Maximum DC Reverse Current @T _J =25°C at Rated DC Blocking Voltage @T _J =125°C	I _R	0.5 50	mA
Typical Thermal Resistance(Note2)	R _{θJC}	1.5	°C/W
Operating Temperature Range	T _J	-55 to +200	°C
Storage Temperature Range	T _{STG}	-55 to +200	°C

NOTES:1.300us pulse width,2% dudy cycle.

2.Thermal Resistance Junction to case(without heatsink).

FIG. 1 – FORWARD CURRENT DERATING CURVE

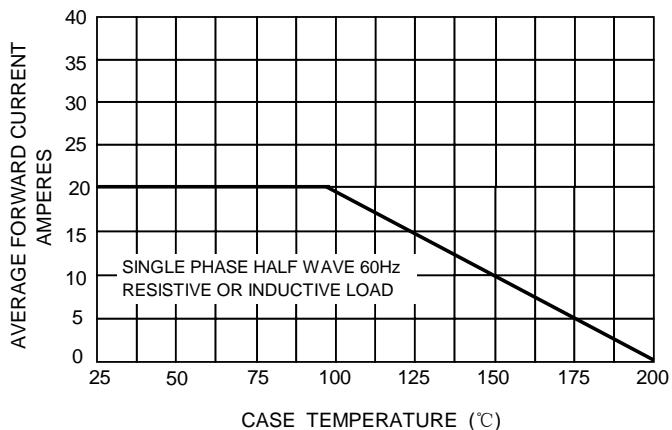


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

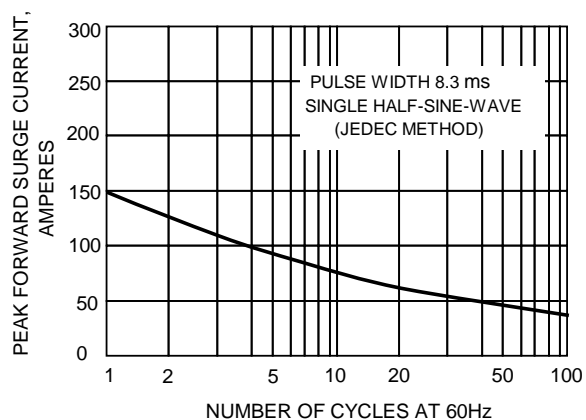


FIG.3-TYPICAL REVER CHARACTERISTICS

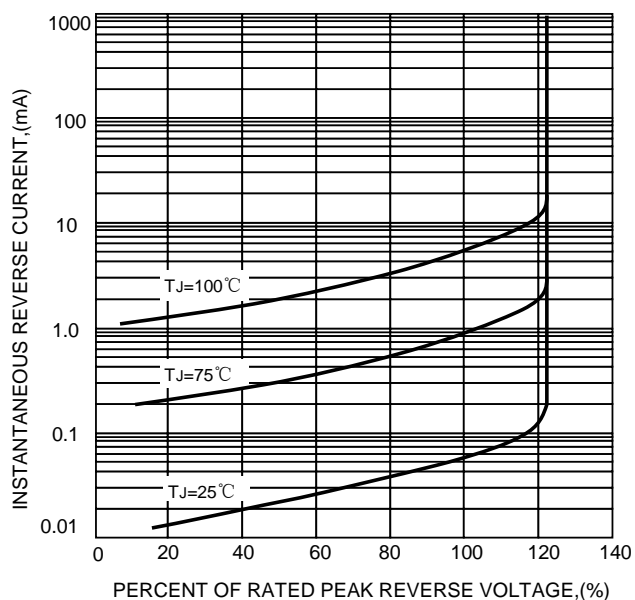


FIG.4-TYPICAL FORWARD CHARACTERISTICS

