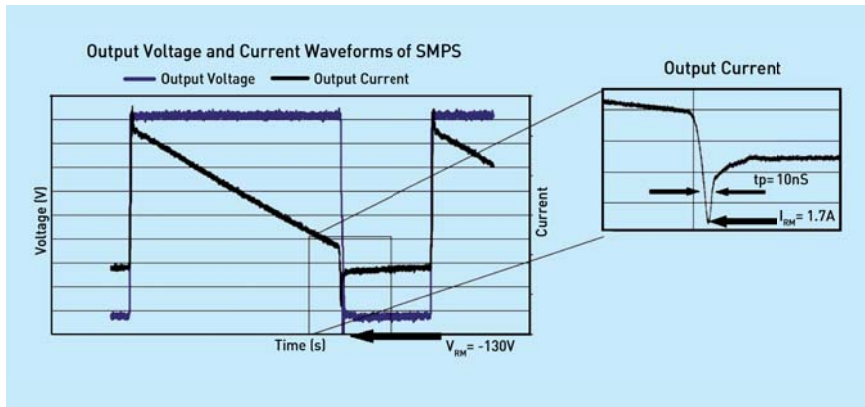


SBR40U100CT

100V SBR[®] - Super Barrier Rectifiers



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applications. Due to the absence of a metal barrier, the SBR[®] has a significantly greater avalanche capability compared to the standard Schottky diode.

With the SBR[®] having the ability to sustain more than twice the reverse avalanche energy of an equivalent Schottky diode, designers can now be sure that their circuit is adequately protected against any large reverse surges.

Output Waveforms of a Typical Flyback Power Supply

Diodes expanded its broad range of high-performance Super Barrier Rectifiers (SBR[®]) with the release of a 100V SBR[®] rectifier. This product has an ultra-low forward voltage drop (VF) which is among the lowest on the market today when compared to all other Schottky rectifiers in its package type. The SBR40U100CT is primarily targeted for use as output rectifiers in switch mode power supplies (SMPS) that offer cooler and more energy-efficient operations for end user applications.

With this release, Diodes is offering five other SBRs in this product family. The new SBR40U60CT, SBR40U150CT and SBR40U200CT devices all achieve a continu-

ous forward current rating of 40A with a low forward voltage drop (VF) and a high maximum junction temperature of 150°C. Diodes is also offering two new 60A rated rectifiers in a standard TO-220AB package, SBR60A150CT and SBR60A200CT. All of these rectifiers are rated for high forward surge capability making them ideal for applications where efficiency and reliability are critical to the design.

The maximum reverse avalanche rating, or PARM (TJ), of a power diode is an important element in a power supply application. It is used in determining a power diodes' ability to safely handle relatively large reverse power levels as seen in power supply

Key Features

- Ultra Low Forward Voltage Drop
- Excellent High Temperature Stability
- Soft, Fast Switching Capability
- 150°C Operating Junction Temperature (except: SBR40U150CT)
- Patented Super Barrier Rectifier Technology

Key Applications

- Notebook adapters
- LCD televisions
- Rack mount servers
- Industrial computers
- Telecom
- Medical power supplies

Service available or already delivered T&R from Manufacturer.
Tapes are available, but not stocked at Avnet Logistics due to low demand.
Device supported by or programming equipment, but the socket for this package must be provided by customer.

P/N	Package	Programming	Taping & Reeling	Marking
SBR40U100CT	TO220-AB			
SBR40U150CT	TO220-AB			
SBR40U200CT	TO220-AB			
SBR40U300CT	TO220-AB			
SBR60A150CT	TO220-AB			
SBR60A200CT	TO220-AB			