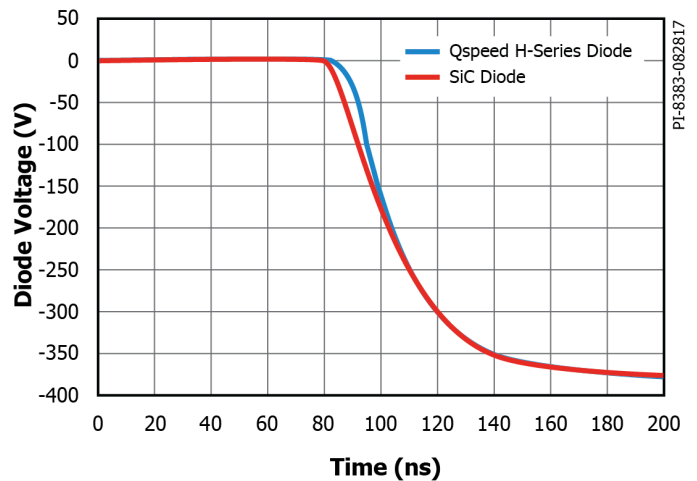
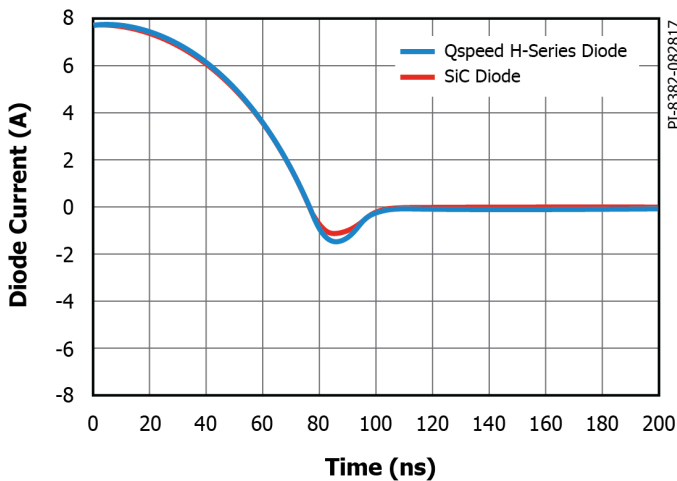




Qspeed™ H-Series Diodes

- Low Q_{RR} , low I_{RRM} , low t_{RR} increases circuit efficiency
- High d_I/dt capable (1000 A/ μ s)
- Enables extremely fast switching
- Soft recovery characteristic reduces EMI
- Eliminates need for snubber circuits
- Reduces EMI filter component size and count

Qspeed Silicon Diodes Match the Performance of Silicon Carbide



Applications

- Boost diode for PFC
- Motor drive circuits
- DC-AC inverters
- Output rectifiers

Output Power

Part Number	V_{RRM} (max)	$I_{F<AVG>}$ ($T_j = 150^\circ\text{C}$)	$V_{F<TYP>}$ ($T_j = 150^\circ\text{C}$)	Q_{RR} ($T_j = 25^\circ\text{C}$)	Q_{RR} ($T_j = 125^\circ\text{C}$)
QH03TZ6002	600 V	3 A	2.1 V	5.8 nC	14.8 nC
QH03BZ600	600 V	3 A	2.1 V	5.8 nC	14.8 nC
QH05TZ600	600 V	5 A	2.2 V	6.5 nC	18.9 nC
QH05BZ600	600 V	5 A	2.2 V	6.5 nC	18.9 nC
QH08TZ600	600 V	8 A	2.2 V	8.0 nC	25.5 nC
QH08BZ600	600 V	8 A	2.2 V	8.0 nC	25.5 nC
QH12TZ600	600 V	12 A	2.3 V	9.2 nC	30 nC
QH12BZ600	600 V	12 A	2.3 V	9.2 nC	30 nC



TO-263/D2PAK (B package),
TO-220 (T package)

Design Support

- Application Note** Qspeed high temperature reverse bias reliability testing (AN-300) (www.power.com/an-300)
- Application Note** Qspeed reverse recovery charge, current and time (AN-301) (www.power.com/an-301)
- Application Note** Qspeed reverse voltage sharing of series rectifiers (AN-302) (www.power.com/an-302)
- Application Note** Qspeed family RoHS compliant soldering considerations (AN-303) (www.power.com/an-303)