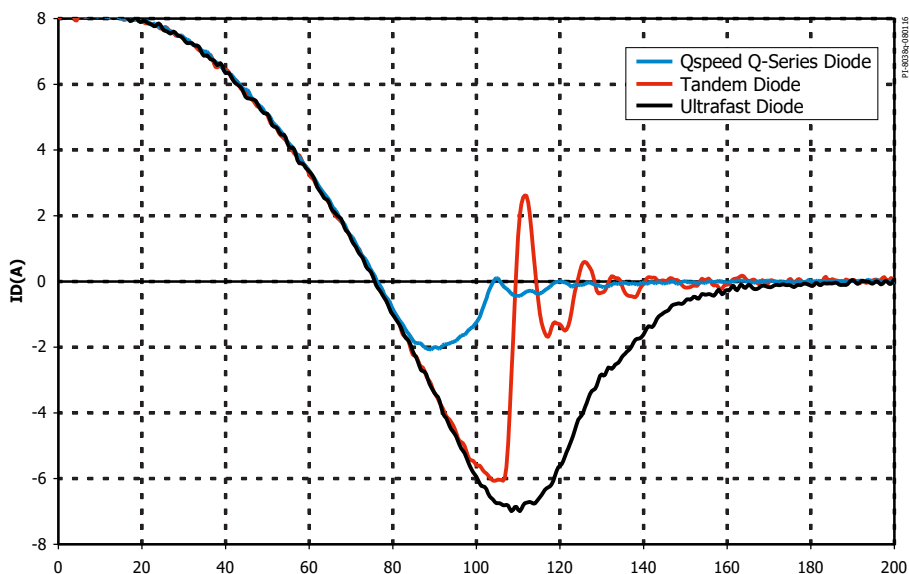


Qspeed™ Q-Series Diodes

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

600 V, Lowest Q_{RR} , High-Performance Silicon Diode



Applications

- PFC boost diodes
- Motor drive circuits
- DC-AC inverters
- Audio amplifiers
- UPS

Output Power

600 V Q-Series				
Product	$I_{F(AVG)}$	V_F	Q_{RR}	Package
LQA03TC600	3 A	2.3 V	5 nC	TO-220AC*
LQA05TC600	5 A	2.28 V	6 nC	TO-220AC*
LQA08TC600	8 A	2.3 V	7 nC	TO-220AC*

300 V Q-Series				
Product	$I_{F(AVG)}$	V_F	Q_{RR}	Package
LQA06T300	6 A	1.34 V	9 nC	TO-220AC
LQA10T300	10 A	1.36 V	10 nC	TO-220AC
LQA16T300	16 A	1.4 V	12 nC	TO-220AC
LQA30T300	30 A	1.45 V	13 nC	TO-220AC
LQA12T300C	6 A	1.34 V	8.5 nC	TO-220AB
LQA20T300C	10 A	1.36 V	10 nC	TO-220AB
LQA20B300C	10 A	1.36 V	10 nC	TO-263AB
LQA30A300C	15 A	1.4 V	12 nC	TO-247AD
LQA32T300C	16 A	1.4 V	12 nC	TO-220AB
LQA60A300C	30 A	1.45 V	13 nC	TO-247AD

200 V Q-Series				
Product	$I_{F(AVG)}$	V_F	Q_{RR}	Package
LQA10T200C	5 A	0.8 V	15.6 nC	TO-220AB
LQA10N200C	5 A	0.8 V	15.6 nC	TO-252
LQA20T200C	10 A	0.85 V	20 nC	TO-220AB
LQA20N200C	10 A	0.85 V	20 nC	TO-252
LQA30T200C	15 A	0.86 V	21.5 nC	TO-220AB
LQA30B200C	15 A	0.86 V	21.5 nC	TO-263AB
LQA40T200C	20 A	0.875 V	22 nC	TO-220AB
LQA40B200C	20 A	0.875 V	22 nC	TO-263AB



Packages: TO-220AC, D2PAK, DPAK, TO-247AD, TO-220AB

Notes: $I_{F(AVG)}$: $T_J = 150\text{ }^\circ\text{C}$; V_F : $T_J = 150\text{ }^\circ\text{C}$; Q_{RR} : $T_J = 25\text{ }^\circ\text{C}$; 600 V TO-220AC = isolated

Design Support

Application Note

Qspeed high temperature reverse bias (HTRB) reliability testing (AN-300) (www.power.com/an-300)