

## HC-45/U or UM1

Through Hole Crystals



### UTE C 93-611 Standard referenced crystal codes and key specifications

Reference Crystal Code	Overtone	Nominal Frequency (MHz)	Load Capacitance (pF)	Calibration tolerance (ppm)	Frequency stability over temperature deviation (ppm)	Operating temperature range (°C)
QB 644	1	16 to 35	30	±10	±4	5 to 55
QB 645	1	16 to 35	30	±10	±4	-10 to 70
QB 646	1	16 to 35	30	±10	±25	-40 to 85
QB 647	1	16 to 35	30	±10	±30	-55 to 100
QB 648	1	16 to 35	30	±10	±5	5 to 55
QB 649	1	16 to 35	30	±10	±10	-10 to 70
QB 650	1	16 to 35	30	±10	±30	-40 to 85
QB 651	1	16 to 35	30	±10	±40	-55 to 100
QM 03	1	16 to 35	30	±10	±50	-10 to 70
QB 652	3	30 to 90	∞	±10	±4	5 to 55
QB 653	3	30 to 90	∞	±10	±4	-10 to 70
QB 654	3	30 to 90	∞	±10	±15	-40 to 85
QB 655	3	30 to 90	∞	±10	±30	-55 to 100
QB 656	3	30 to 90	∞	±10	±5	5 to 55
QB 657	3	30 to 90	∞	±10	±10	-10 to 70
QB 658	3	30 to 90	∞	±10	±30	-40 to 85
QB 659	3	30 to 90	∞	±10	±40	-55 to 100
QB 716	3	30 to 90	∞	±10	±25	-40 to 85
QB 717	3	30 to 90	∞	±10	±30	-55 to 100
QB 660	5	60 to 130	∞	±10	±4	5 to 55
QB 661	5	60 to 130	∞	±10	±4	-10 to 70
QB 662	5	60 to 130	∞	±10	±25	-40 to 85
QB 663	5	60 to 130	∞	±10	±30	-55 to 100
QB 664	5	60 to 130	∞	±10	±5	5 to 55
QB 665	5	60 to 130	∞	±10	±10	-10 to 70
QB 666	5	60 to 130	∞	±10	±30	-40 to 85
QB 667	5	60 to 130	∞	±10	±40	-55 to 100