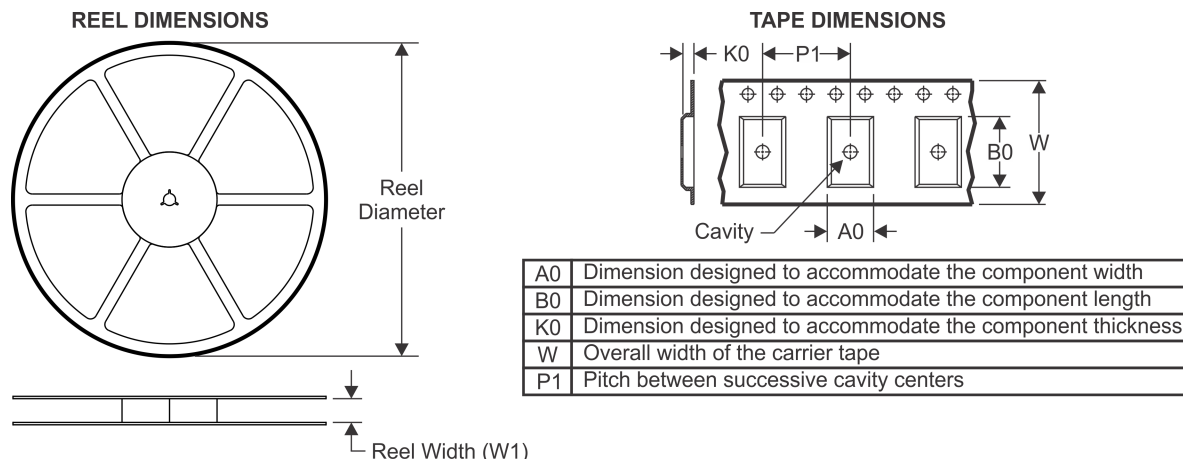


TAPE AND REEL INFORMATION



QUADRANT ASSIGNMENTS FOR PIN 1 ORIENTATION IN TAPE



*All dimensions are nominal

Device	Package Type	Package Drawing	Pins	SPQ	Reel Diameter (mm)	Reel Width W1 (mm)	A0 (mm)	B0 (mm)	K0 (mm)	P1 (mm)	W (mm)	Pin1 Quadrant
MSP430F5419AIZCAR	NFBGA	ZCA	113	2500	330.0	16.4	7.3	7.3	1.5	12.0	16.0	Q1
MSP430F5436AIZCAR	NFBGA	ZCA	113	2500	330.0	16.4	7.3	7.3	1.5	12.0	16.0	Q1
MSP430F5438AIZCAR	NFBGA	ZCA	113	2500	330.0	16.4	7.3	7.3	1.5	12.0	16.0	Q1

TAPE AND REEL BOX DIMENSIONS


*All dimensions are nominal

Device	Package Type	Package Drawing	Pins	SPQ	Length (mm)	Width (mm)	Height (mm)
MSP430F5419AIZCAR	NFBGA	ZCA	113	2500	350.0	350.0	43.0
MSP430F5436AIZCAR	NFBGA	ZCA	113	2500	350.0	350.0	43.0
MSP430F5438AIZCAR	NFBGA	ZCA	113	2500	341.0	336.6	31.8