

# 8X3.8 Plastic SMD Crystals

### Frequency Range:

20.00kHz to 75.00kHz

### **Features:**

- High Reliability & Low Cost Unit
- Tight Stability & Extended Temperature Available
- RoHS Complaint





■ Holder Type: M3







### **■ Standard Specifications**

Item	Value		
Frequency Range	32.768kHz	20.0~75.0kHz	
Equivalent Series Resistance (ESR)	50kΩ Max.	55kΩ Max.	
Frequency Tolerance @ 25 °C	±20ppm (tighter tolerance	±20ppm (tighter tolerance also available)	
Temperature Coefficient	$-0.034 \pm 0.006$ ppm /°C <sup>2</sup>	-0.034 ± 0.006ppm /°C <sup>2</sup>	
Operating Temperature Range	-20 °C to +70 °C (other ope	-20 °C to +70 °C (other operating range also available)	
Operable Temperature Range	-40 °C to +85 °C	-40 °C to +85 °C	
Load Capacitance	6.0pF, 8.0pF, 12.5pF is sta	6.0pF, 8.0pF, 12.5pF is standard	
Drive Level	0.1μW Typ. (1.0μW Max	0.1μW Typ. (1.0μW Max)	
Shunt Capacitance	2.5pF Max	2.5pF Max	
Ageing	±5ppm/year	±5ppm/year	

### Note

<sup>4.</sup> Customers have to agree to the "Guideline for handling crystal units" and "Standard Terms and Condition of Sales" which is printed this catalog before placing orders to our company or our distributors. There are also unpredictable factors such as applied condition, oscillation margin and etc and customers must check them beforehand. In case of queries, please do not fail to send inquiry to our company before ordering.





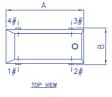
<sup>1.</sup> Manufacturer reserves the right to change the specification and content of this product for improvement without notification.

<sup>2.</sup> Custom specification is welcome. Please contact our sales representative for further details.

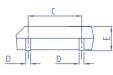
<sup>3.</sup> If the crystal is intended for applications which have direct impact on human life and properties, and require a high degree of reliability and safety concerns, customers must provide full information such as but not limit to the application, electrical and reliability specification at the inquiry beginning stage.

## **8X3.8 Plastic SMD Crystals**

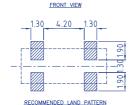
# ■ Dimensions (mm) and Solder Pad Layout (mm)



ITEM	DIMENSION	
Α	8.0 MAX.	
В	3.8 MAX.	
С	5.5	
D	0.5	
E	2.5 MAX.	
F	(0.9)	







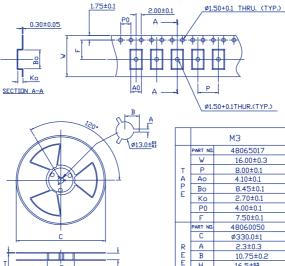


ELECTRODE ARRANGEMENT



REMARK: Do not connect #2 and #3 to external circuit or GND (Floating)

### ■ Tape & Reel (mm)



FEED DIRECTION .

T A P E	W	16.00±0.3	
	P	8.00±0.1	
	Ao	4.10±0.1	
	Во	8.45±0.1	
	Ko	2.70±0.1	
	P0	4.00±0.1	
	F	7.50±0.1	
	PART NO.	48060050	
	С	ø330.0±1	
R	Α	2.3±0.3	
E	В	10.75±0.2	
R E E L	Н	16.5±85	
-	T	2.3±0.3	
	D	100.0±1	
0	QΤΥ.	3000 PCS/R	

МЗ

48065017

REMARKI (1)CAMBERS DO NOT EXCEED 1.0MM IN 100MM.
(2)THE MAXIMUM CUMULATIVETOLERANCE
IS ±0.2MM FOR 10 SPROCKET HOLE PITCH.
(3)THICKNESS OF CARRIER TAPE IS 0.3MM. MATERIAL: TRANSPARENT ANTI-STATICE POLYSTYRENE