

## PRE- ANNOUNCEMENT: FRG- SERIES: FUSIBLE THIN FILM CHIP RESISTORS (UNDER DEVELOPMENT)

**Under  
development**



Thin film expert Susumu pre- announces the new **FRG series** which are thin film precision resistors, that bring all the well known advantages of their best seller product RG series with them, plus the additional feature to act as fuse. FRG series offers high accuracy, best long term stability and low current noise. The fusible feature offers controlled opening of circuit under a defined characteristic – select from three performances A, B & C type to match your requirements.

### FEATURES

- High precision thin film chip resistors with fusing function
- Function as precision resistor under normal condition
- Resistance tolerance:  $\pm 0.1\%$  TCR:  $\pm 25$  ppm/ $^{\circ}\text{C}$
- Function as fusible resistors to protect the circuit under overload voltage condition

### APPLICATIONS

- Automotive electronics
- Robots, factory automation equipments
- Industrial measurement instrumentation
- Medical electronics

### ELECTRICAL SPECIFICATION

TYPE	POWER RATING FUSING TYPE A	POWER RATING FUSING TYPE B	POWER RATING FUSING TYPE C	TCR [ppm/ $^{\circ}\text{C}$ ]	RESISTANCE RANGE [ $\Omega$ ] $\pm 0.5\%$ [D] & $\pm 0.1\%$ [B]	MAXIMUM VOLTAGE	RESISTANCE VALUE SERIES	OPERATING TEMPERATURE	PACKING QUANTITY
FRG1608	-	1/10 W	1/10 W	$\pm 25$ (P) $\pm 50$ (Q)	100 - 10 K	75 V			
FRG2012	-	1/8 W	1/8 W	$\pm 25$ (P) $\pm 50$ (Q)	100 - 10 K	100 V	E-24	-55 $^{\circ}\text{C}$ ~ 155 $^{\circ}\text{C}$	T1 T5
FRG3216	1/4 W	1/4 W	-	$\pm 25$ (P) $\pm 50$ (Q)	100 - 10 K	150 V			

### FUSING PERFORMANCE

FUSING PERFORMANCE			
FUSING PERFORMANCE TYPE	FUSING POWER [W]	FUSING TIME [s]	INSULATION RESISTANCE
Type A	5.0 W	1 s	10 M $\Omega$ @ 100 V
Type B	3.5 W		
Type C	2.5 W		

<Notes> Please note that this device is still under the development and therefore the design and specifications and design are subject to change.

