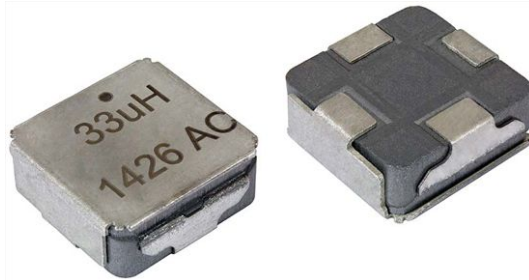


Low Profile, High Current Inductors with e-field Shield



Manufactured under one or more of the following:
US Patents; 6,198,375/6,204,744/6,449,829/6,460,244.
 Several foreign patents, and other patents pending.

STANDARD ELECTRICAL SPECIFICATIONS				
L ₀ INDUCTANCE ± 20 % AT 100 kHz, 0.25 V, 0 A (μH)	DCR TYP. 25 °C (mΩ)	DCR MAX. 25 °C (mΩ)	HEAT RATING CURRENT DC TYP. (A) ⁽³⁾	SATURATION CURRENT DC TYP. (A) ⁽⁴⁾
0.47	1.55	1.66	30.0	28.5
1.0	2.87	3.07	23.5	24.0
2.2	8.15	8.76	15.0	12.0
3.3	11.0	11.81	11.0	12.0
4.7	14.3	15.32	9.8	9.2
5.6	16.5	17.60	9.3	9.0
6.8	20.9	22.36	9.1	9.0
10	30.9	33.06	6.5	8.5
15	47.0	50.29	5.1	7.7
22	70.5	75.44	4.1	6.4
33	110	117.70	3.7	4.2
47	167	178.00	2.5	4.5

Notes

- (1) All test data is referenced to 25 °C ambient
- (2) Operating temperature range -55 °C to +155 °C
- (3) DC current (A) that will cause an approximate ΔT of 40 °C
- (4) DC current (A) that will cause L₀ to drop approximately 20 %
- (5) The part temperature (ambient + temp. rise) should not exceed 155 °C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

FEATURES

- High temperature, up to 155 °C
- Shielded construction
- Frequency range up to 1 MHz
- Integrated e-field shield eliminates need for separate shielding
- 20 dB e-field reduction at 1 cm
- - Measured vertically from top center of device
- Lowest DCR/μH, in this package size
- Handles high transient current spikes without saturation
- Coplanarity of the 4 terminals ≤ 100 μm
- AEC-Q200 qualified
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

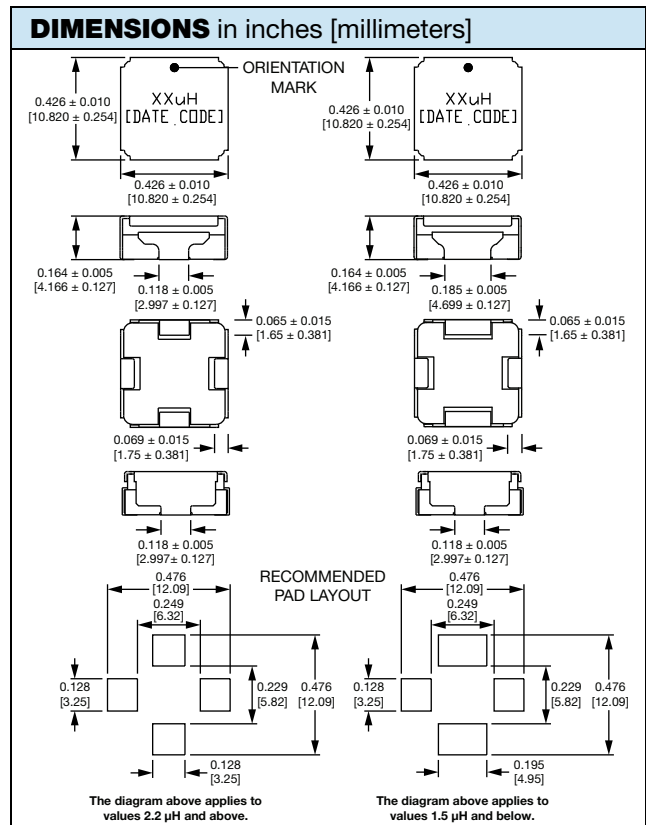
AUTOMOTIVE GRADE



RoHS COMPLIANT

APPLICATIONS

- Engine and transmission control units
- Diesel injection drivers
- Noise suppression for motors
 - Windshield wipers, power seats, power mirrors, heating and ventilation blowers, HID lighting
- LED drivers

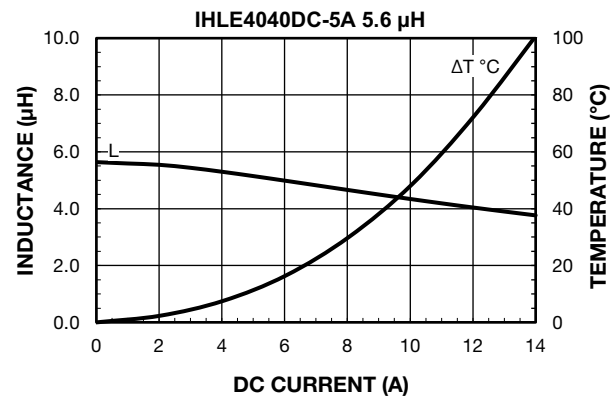
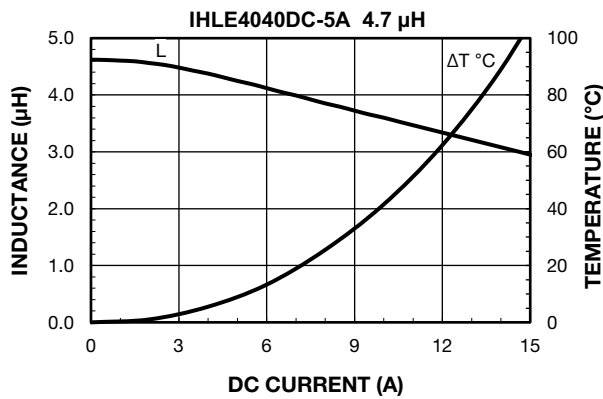
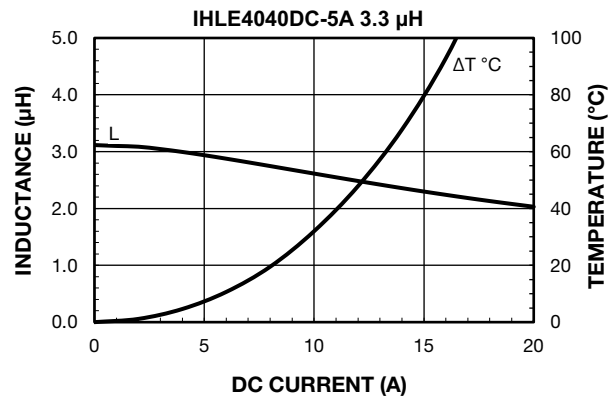
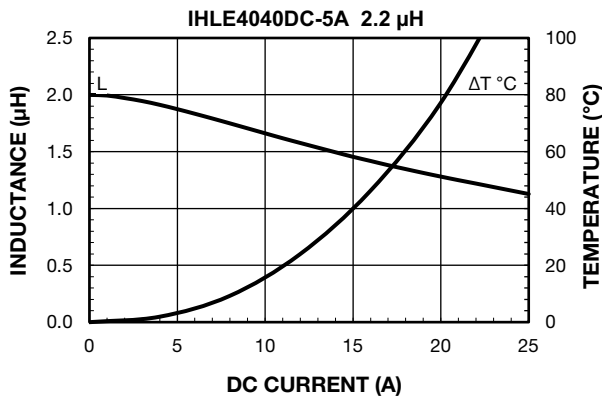
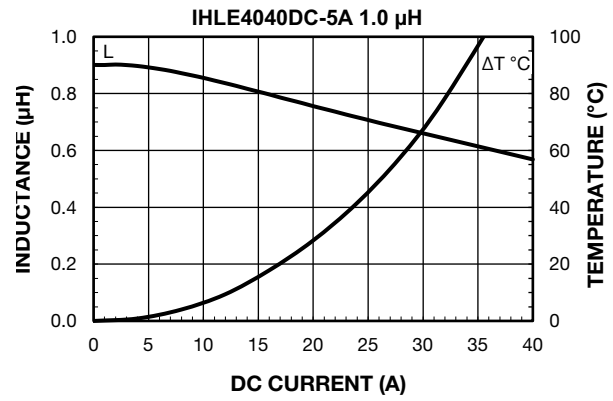
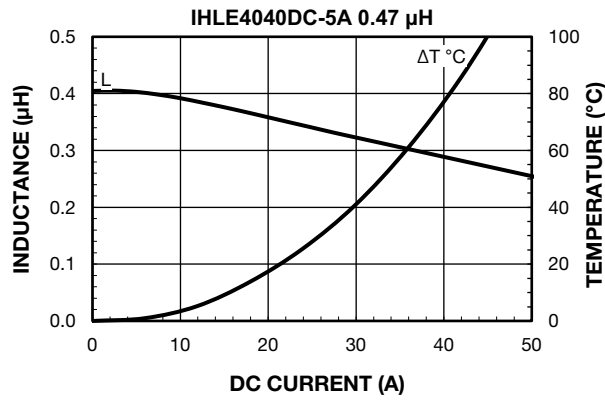


DESCRIPTION		
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE
IHLE-4040DC-5A	33 μH	± 20 %
PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD	
ER	e3	

GLOBAL PART NUMBER										
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE VALUE	TOL.	SERIES					
I H L E	4 0 4 0 D C	E R	3 3 0	M	5 A					

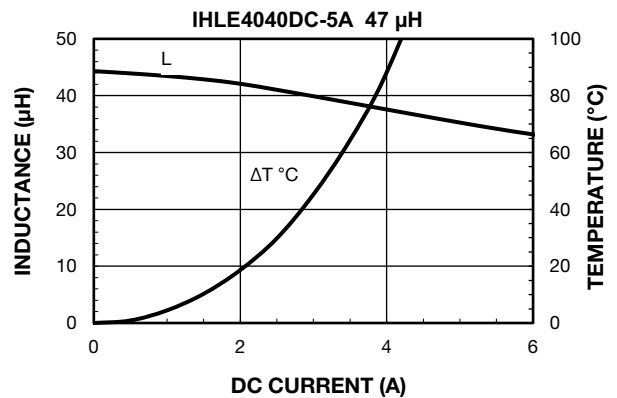
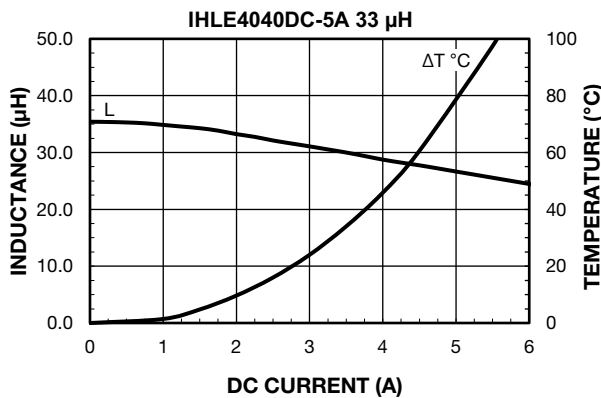
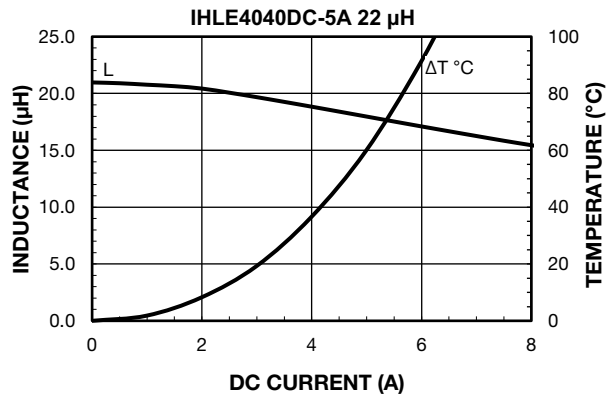
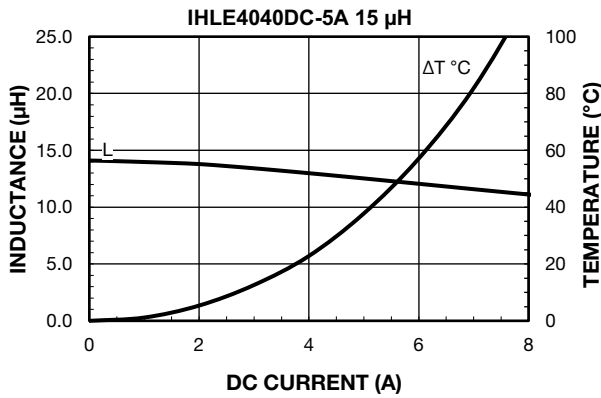
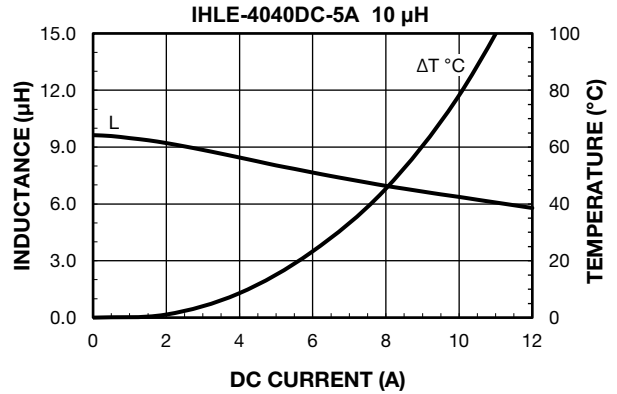
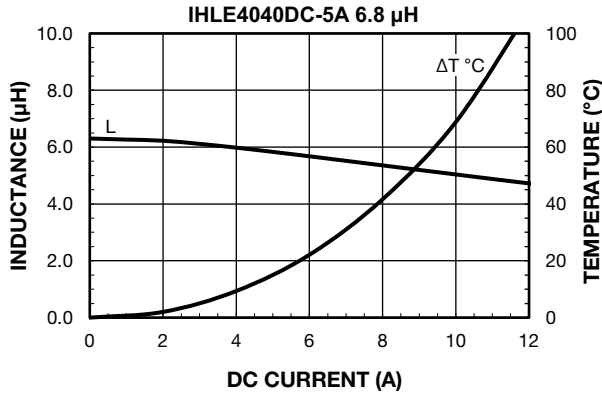


PERFORMANCE GRAPHS



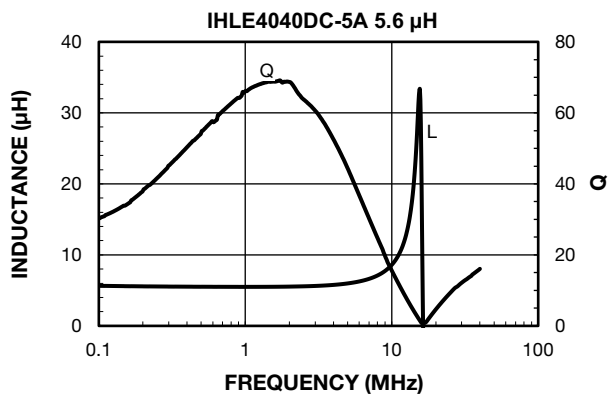
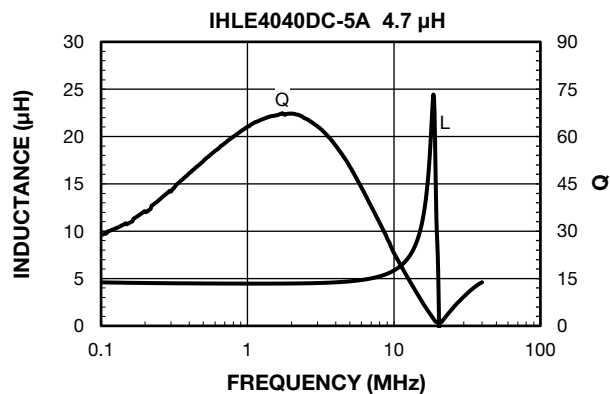
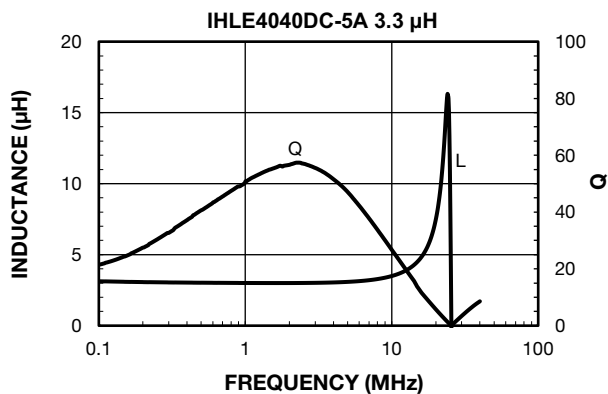
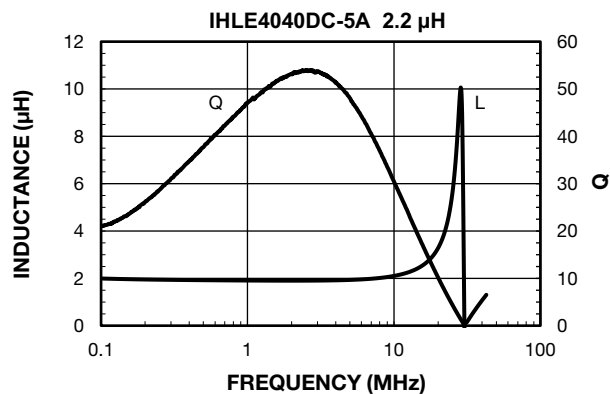
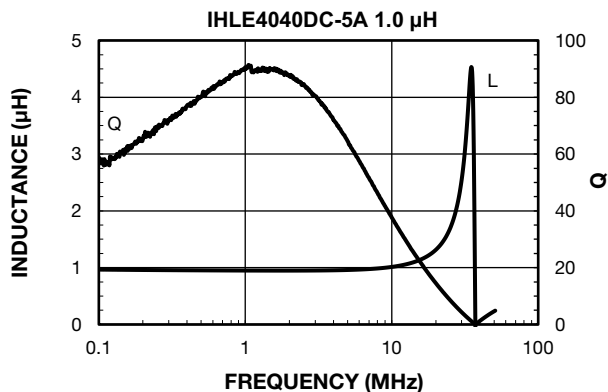
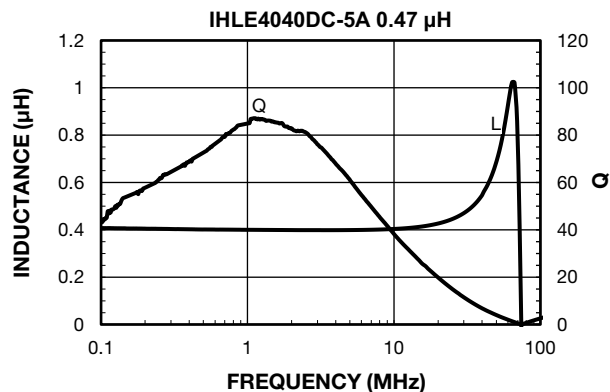


PERFORMANCE GRAPHS



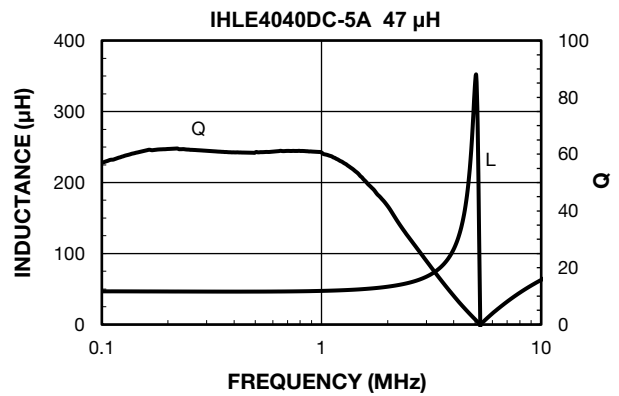
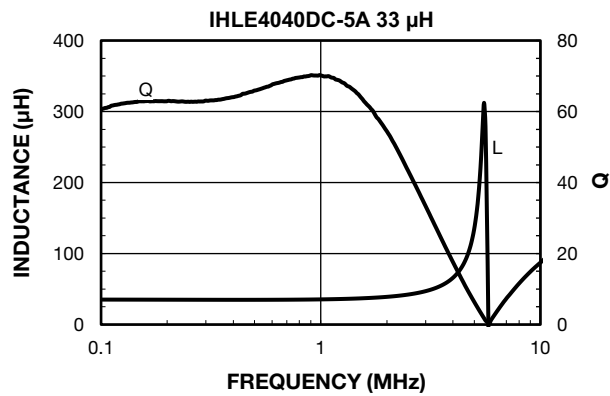
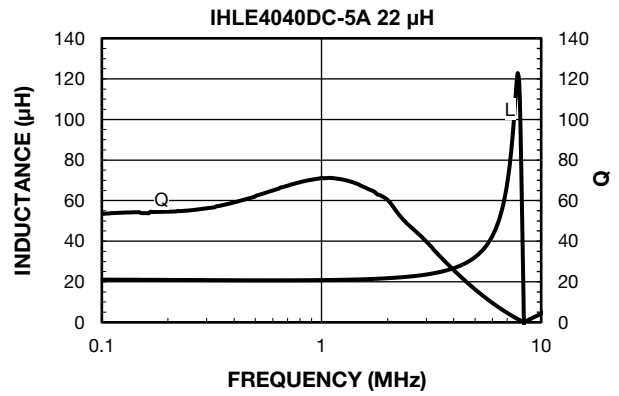
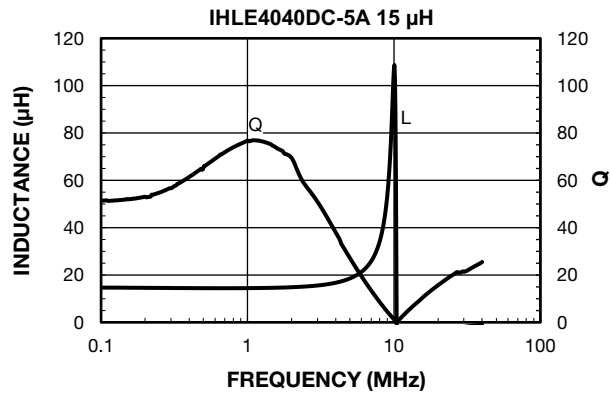
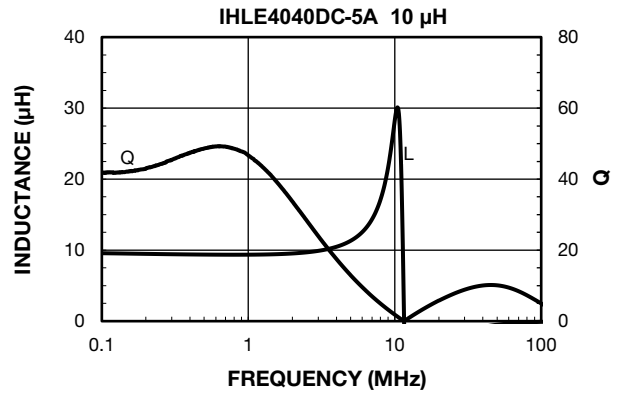
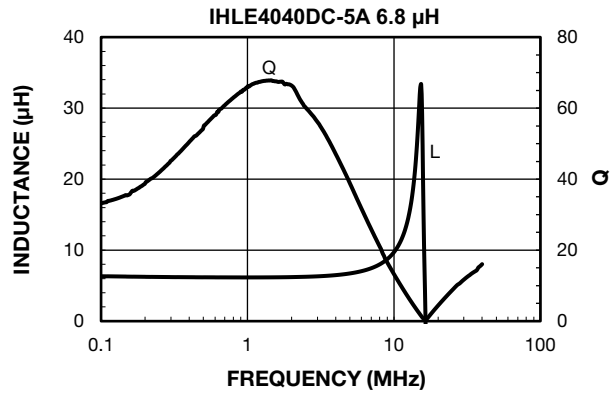


PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





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