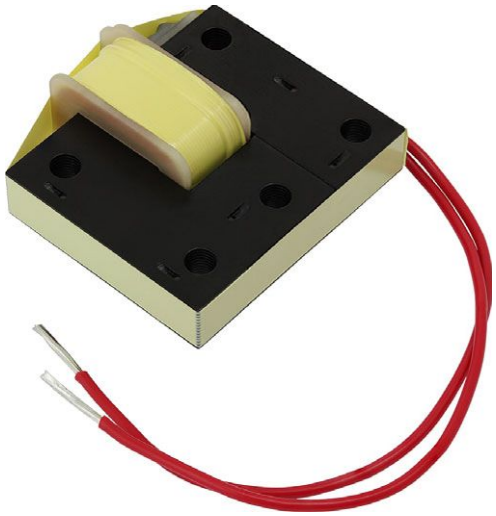
Haptic Feedback Actuator



FEATURES

- Solenoid construction provides high impulse vibration for clear tactile feedback in noisy environments
- Actuator can drive a 0.5 kg load to 6 *g*'s of acceleration with a 12 V, 5 ms pulse
- Standard lead termination is dipped 100 % tin solder; customer specific connectors available upon request
- Compact, two piece construction with mounting holes; stationary "U" core and moving "I-bar" for easy implementation in touch screen or touch button application
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free
RoHS COMPLIANT
HALOGEN FREE GREEN (5-2008)

APPLICATIONS

- Industrial touch screens and displays for appliances, building automation and control, factory automation and control, and electronic point of sale
- Medical touch screens for human-machine interfaces for healthcare monitoring, diagnostic, surgical, and treatment equipment

LINKS TO ADDITIONAL RESOURCES

3D Models

STANDARD ELECTRICAL SPECIFICATIONS

PART NUMBER	FORCE COEFFICIENT (1)	RESPONSE TIME TYP. (ms)	L_0 INDUCTANCE ± 20 % AT 1 kHz, 0.25 V, 0 A (mH)	DCR TYP. (Ω)	DCR MAX. (Ω)	DIELECTRIC WITHSTAND VOLTAGE COIL TO CORE (V_{DC})
IHPT1411AFEBR73AB0	0.73	5.0	1.8	0.95	1.09	150

Notes

- All specifications are referenced to 25 °C ambient, and assume a 0.75 mm (0.030") gap
- Operating temperature range -40 °C to +105 °C
- The part temperature (ambient + temp. rise) should not exceed 105 °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
- Rated voltage: 16 V maximum

(1) Applied force, in newtons, can be estimated by the following equation: F = FORCE COEFFICIENT x I_{PK}^2

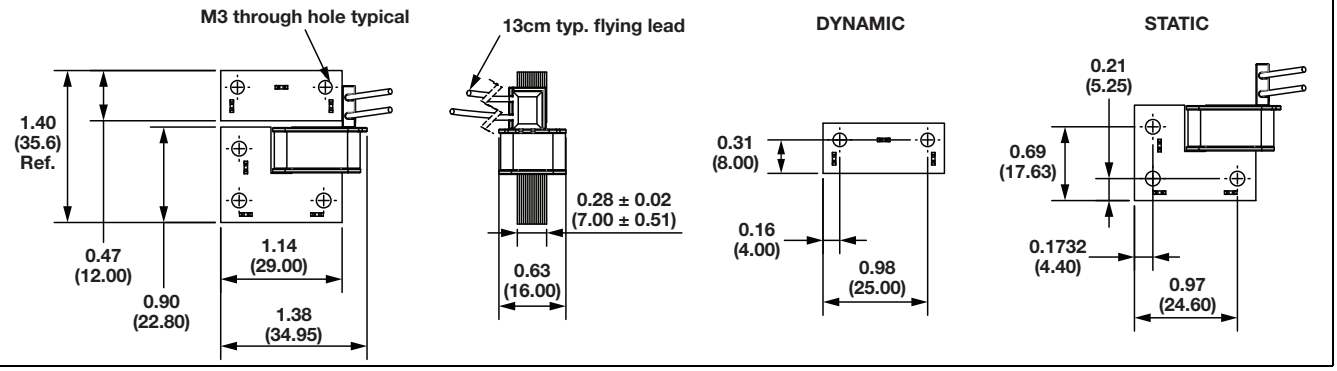
MATERIAL

Core	Laminated steel
Wire	Copper, PU / PA insulated
Solder	Hot dip tin

SOLDER COMPOSITION

Sn	99.3 %
Cu	0.7 %

DIMENSIONS in inches (millimeters)



For technical questions, contact: magnetics@vishay.com

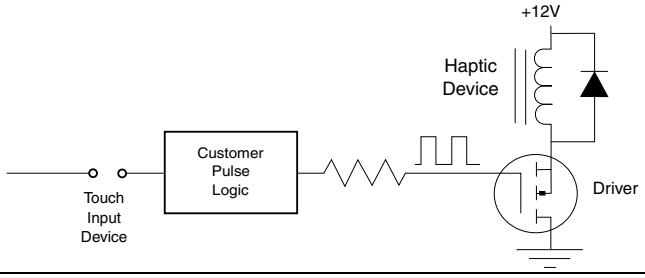
DESCRIPTION

IHPT-1411AF-AB0	R73	EB	e3
MODEL	FORCE COEFFICIENT	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

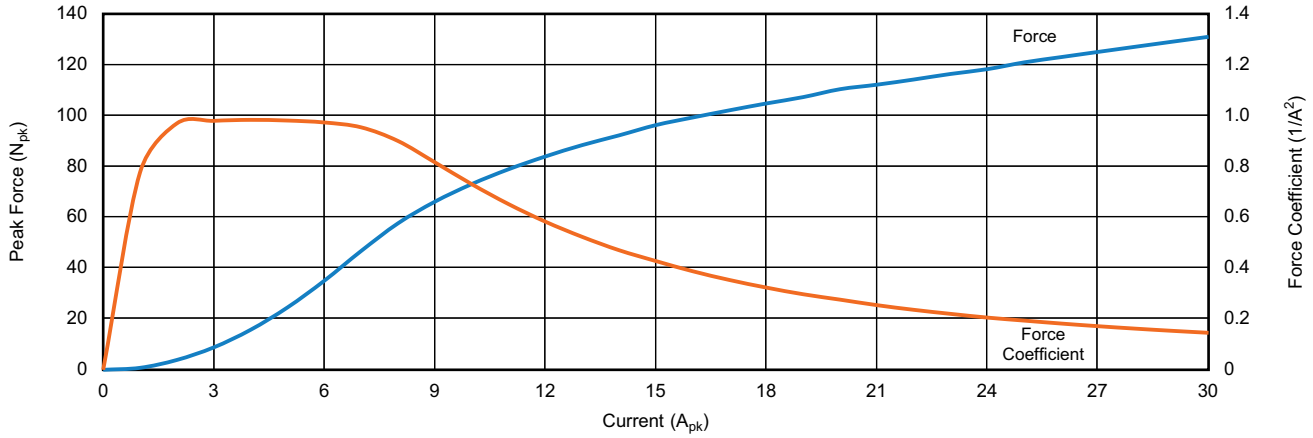
GLOBAL PART NUMBER

I	H	P	T	1	4	1	1	A	F	E	B	R	7	3	A	B	0
MODEL				SIZE						PACKAGE CODE		FORCE COEFFICIENT			SERIES		

TYPICAL APPLICATION



IHPT PEAK FORCE RESPONSE (Typical)



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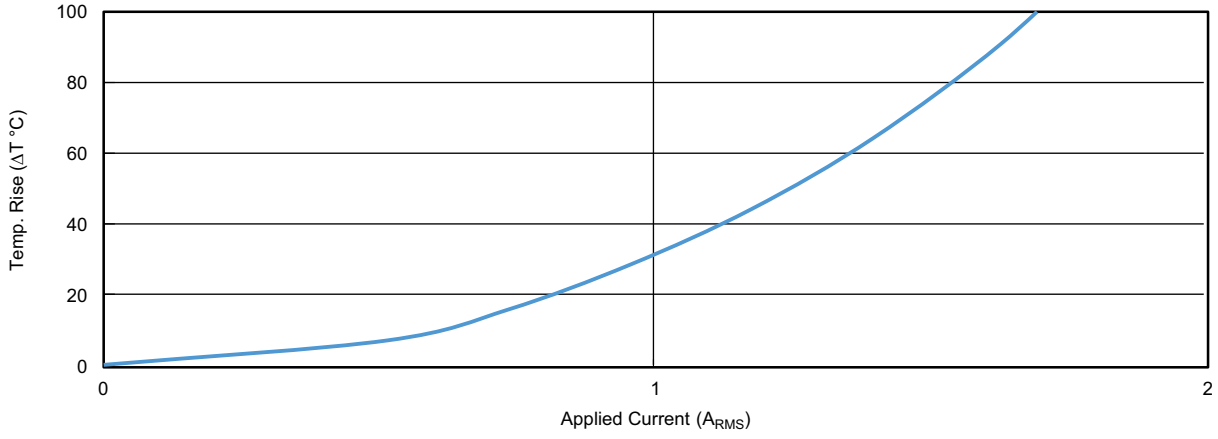

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