

# Power Inductor CDH25D09,CDH25D11



## ■ Features

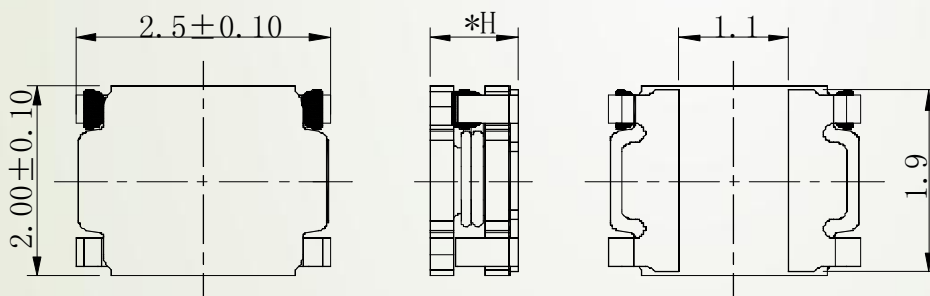
- ⊙ Magnetically unshielded construction.
- ⊙ Land pattern is compatible to Chip 2520 size.
- ⊙ Storage temperature range:-40°C~+105°C.
- ⊙ Operating temperature range:-40°C~+105°C(including coil's self-heat).
- ⊙ RoHS Compliance and Halogen free.

## ■ Applications

Ideally used in Mobile phone,PDA,MP3,DSC/DVC,HDD,etc as converter inductor.

## ■ Shapes and Dimensions/Recommended Land Patterns(mm)

### ◆ Dimensions (mm)



### ◆ Land pattern



**\*H CDH25D09: 1.0mm Max;  
CDH25D11: 1.2mm Max.**

# Power Inductor CDH25D09,CDH25D11



## ■Electrical Characteristics specification.

### ◆ CDH25D09

Part Name	Stamp	Inductance 1MHz ( $\mu$ H)	D.C.R. Max.(Typ.) ( $\Omega$ )	Saturation Current (A) ※1	Temperature Rise Current (A) ※2
CDH25D09HF-R47NC	A	0.47 $\pm$ 30%	57.4m(45.9m)	2.47(2.90)	2.21
CDH25D09HF-R68NC	B	0.68 $\pm$ 30%	70.5m(56.4m)	2.17(2.55)	2.06
CDH25D09HF-1R0NC	C	1.0 $\pm$ 30%	0.112(89.1m)	1.65(1.94)	1.53
CDH25D09HF-1R5NC	D	1.5 $\pm$ 30%	0.154(0.123)	1.40(1.65)	1.36
CDH25D09HF-2R2MC	E	2.2 $\pm$ 20%	0.233(0.186)	1.15(1.35)	1.13
CDH25D09HF-3R3MC	F	3.3 $\pm$ 20%	0.310(0.248)	0.95(1.12)	0.97
CDH25D09HF-4R7MC	G	4.7 $\pm$ 20%	0.463(0.370)	0.78(0.92)	0.8
CDH25D09HF-6R8MC	J	6.8 $\pm$ 20%	0.675(0.540)	0.65(0.76)	0.51
CDH25D09HF-100MC	K	10.0 $\pm$ 20%	0.923(0.738)	0.54(0.63)	0.45

www.sumida.com

# Power Inductor CDH25D09,CDH25D11



## ■Electrical Characteristics specification.

### ◆ CDH25D11

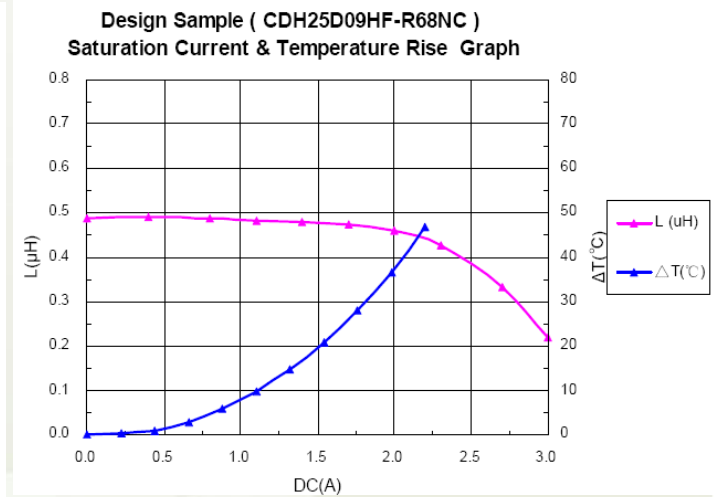
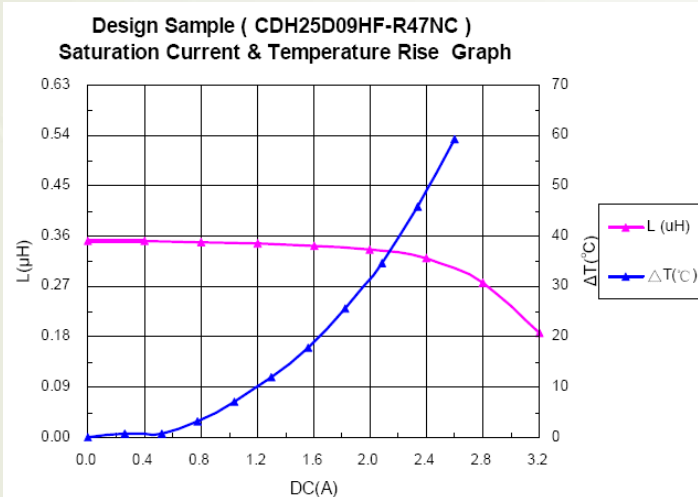
Part Name	Stamp	Inductance 1MHz ( $\mu$ H)	D.C.R. Max.(Typ.) ( $\Omega$ )	Saturation Current (A) ※1	Temperature Rise Current (A) ※2
CDH25D11HF-R47NC	A	$0.47 \pm 30\%$	67m(54m)	3.40(4.00)	1.89
CDH25D11HF-R68NC	K	$0.68 \pm 30\%$	95m(76m)	2.67(3.15)	1.58
CDH25D11HF-1R0NC	B	$1.0 \pm 30\%$	0.106(85m)	2.47(2.90)	1.55
CDH25D11HF-1R5NC	C	$1.5 \pm 30\%$	0.156(0.125)	2.00(2.38)	1.32
CDH25D11HF-2R2MC	D	$2.2 \pm 20\%$	0.184(0.147)	1.63(1.92)	1.17
CDH25D11HF-3R3MC	E	$3.3 \pm 20\%$	0.288(0.230)	1.40(1.63)	0.92
CDH25D11HF-4R7MC	F	$4.7 \pm 20\%$	0.421(0.337)	1.15(1.35)	0.75
CDH25D11HF-6R8MC	G	$6.8 \pm 20\%$	0.611(0.489)	0.95(1.12)	0.57
CDH25D11HF-100MC	J	$10.0 \pm 20\%$	0.978(0.782)	0.75(0.88)	0.45

※1、 Saturation Current: This indicates the value of D.C. current when the inductance decreases to 70% of its nominal value.

※2、 Temperature Rise Current: The actual current when temperature of coil becomes  $\Delta T=40^{\circ}\text{C}$ .( $T_a=20^{\circ}\text{C}$ )

## ■Rated Current Curve

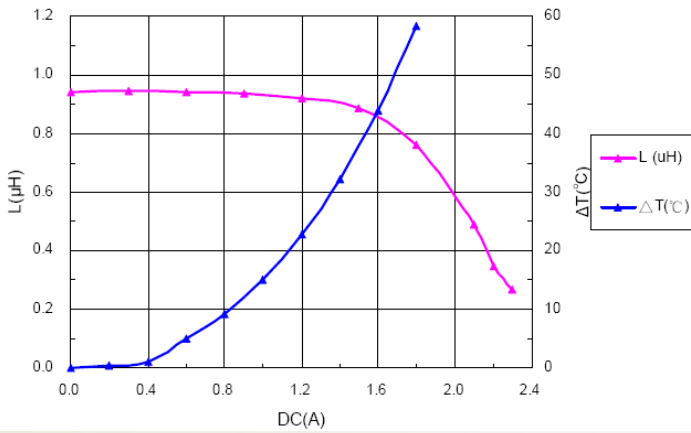
### ◆ CDH25D09



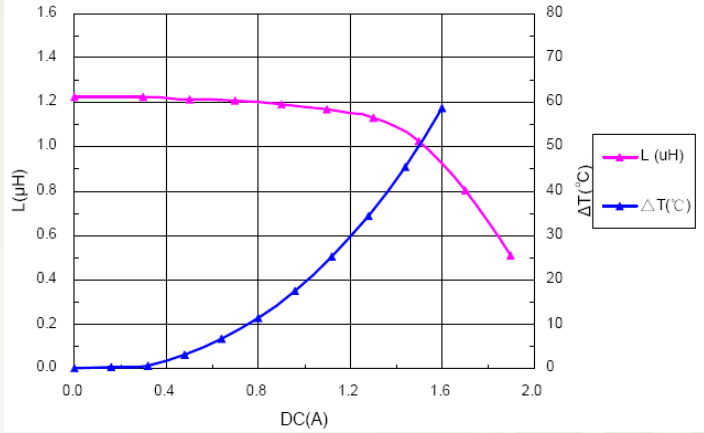
# Power Inductor CDH25D09, CDH25D11



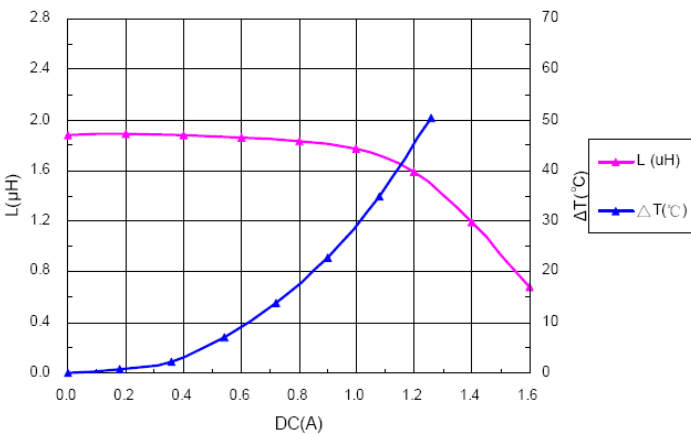
Design Sample ( CDH25D09HF-1R0NC )  
Saturation Current & Temperature Rise Graph



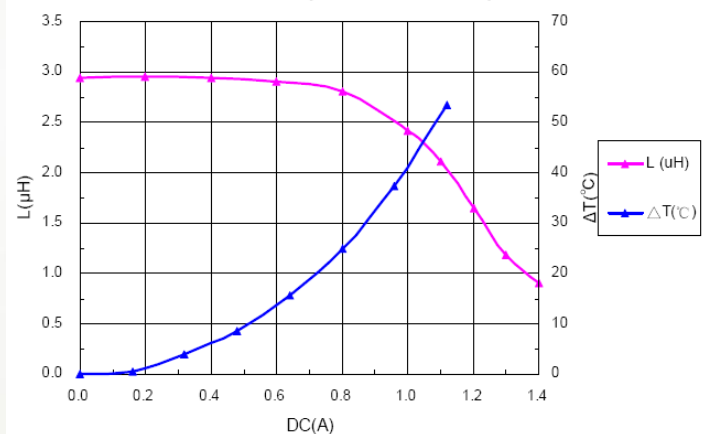
Design Sample ( CDH25D09HF-1R5NC )  
Saturation Current & Temperature Rise Graph



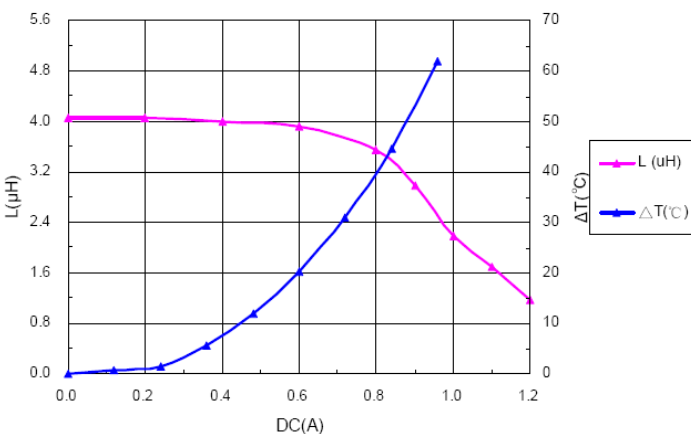
Design Sample ( CDH25D09HF-2R2MC )  
Saturation Current & Temperature Rise Graph



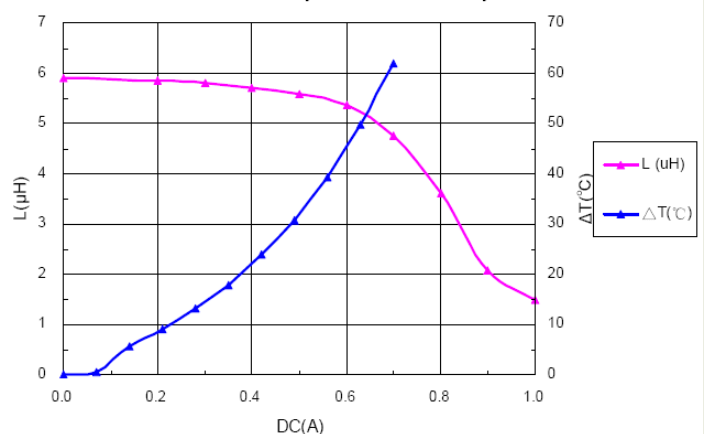
Design Sample ( CDH25D09HF-3R3MC )  
Saturation Current & Temperature Rise Graph



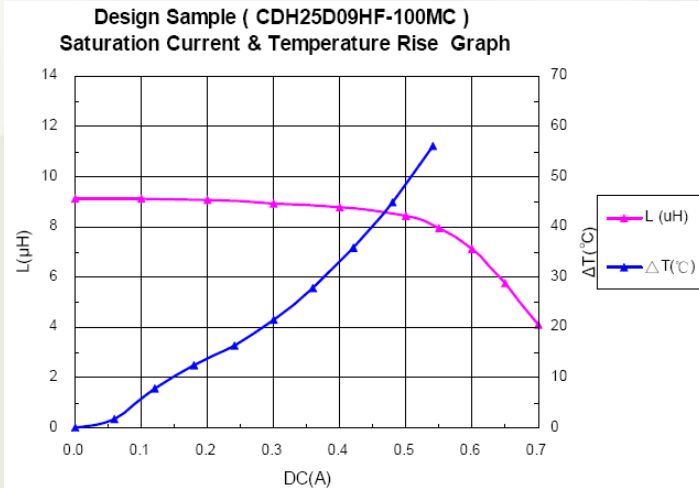
Design Sample ( CDH25D09HF-4R7MC )  
Saturation Current & Temperature Rise Graph



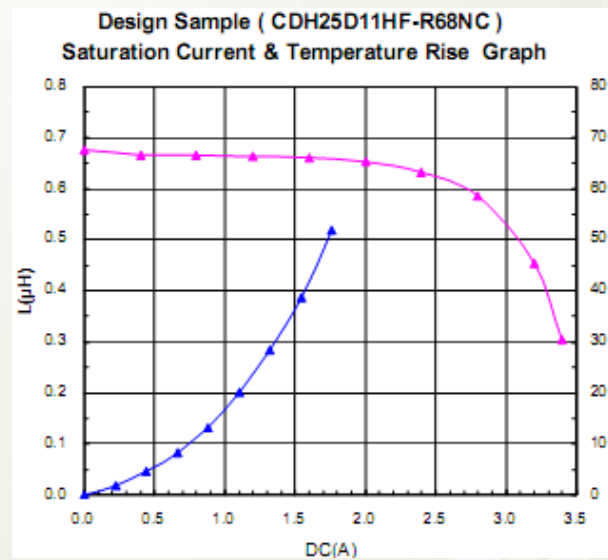
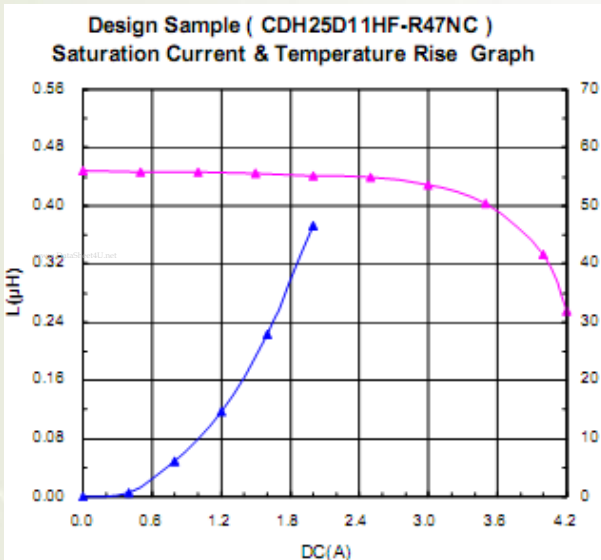
Design Sample ( CDH25D09HF-6R8MC )  
Saturation Current & Temperature Rise Graph



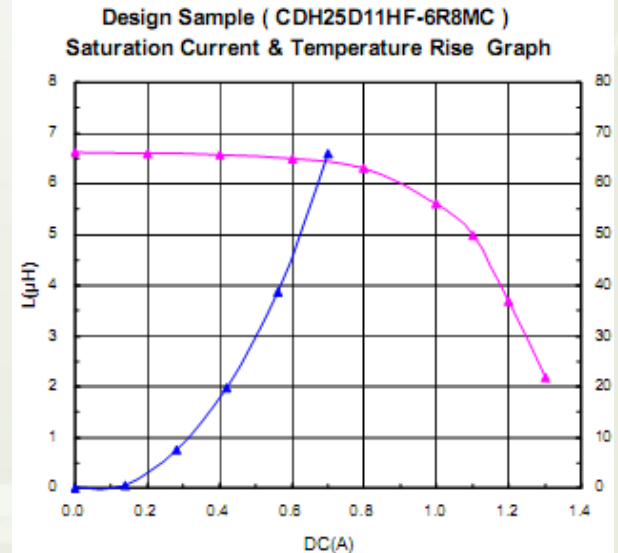
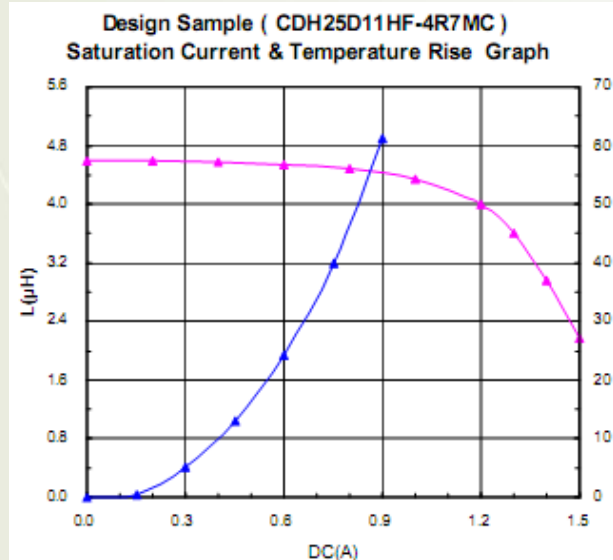
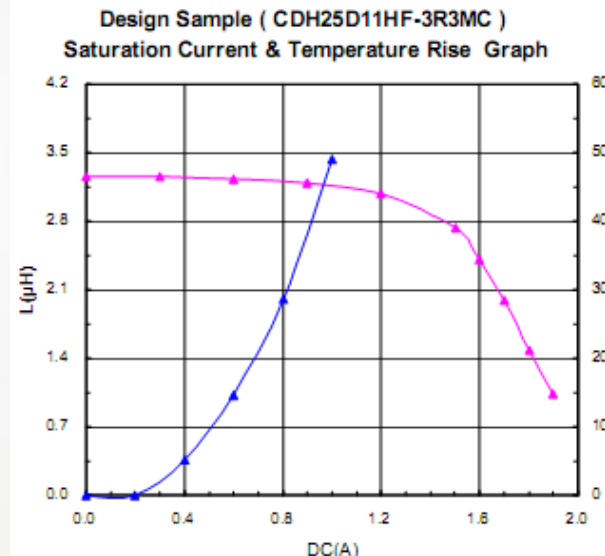
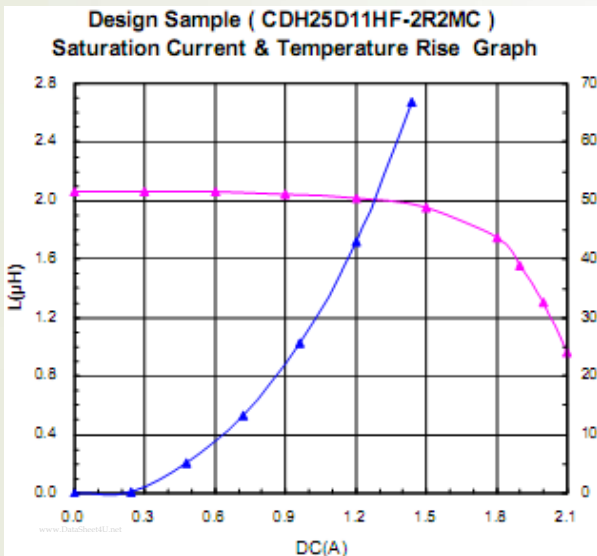
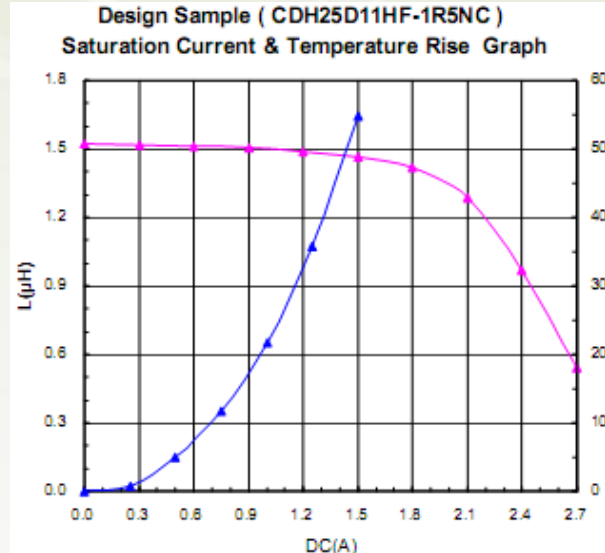
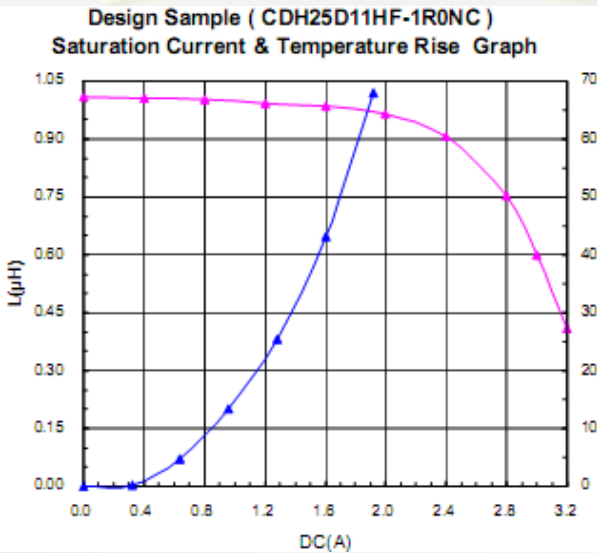
# Power Inductor CDH25D09,CDH25D11



## ◆ CDH25D11



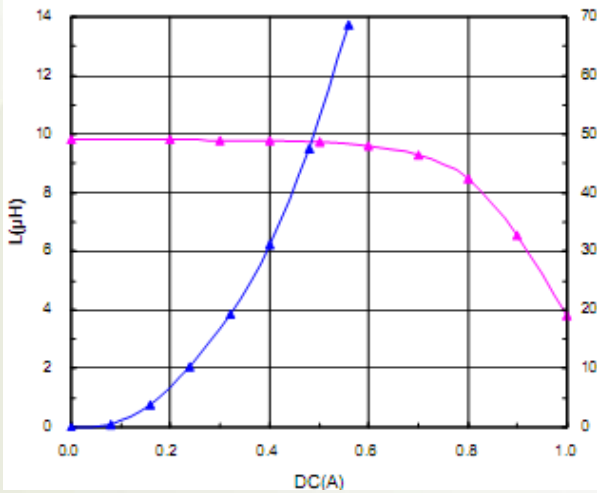
# Power Inductor CDH25D09,CDH25D11



# Power Inductor CDH25D09,CDH25D11



Design Sample ( CDH25D11HF-100MC )  
Saturation Current & Temperature Rise Graph



www.sumida.com

## For More Information

### Hong Kong

Tel.+852-2880-6688  
FAX.+852-2565-9600

### Shanghai

Tel.+86-021-5836-3299  
FAX.+86-021-5836-3266

### Shenzhen

Tel.+86-755-8291-0228  
FAX.+86-755-8291-0338

### Taipei

Tel.+886-2-8751-2737  
FAX.+886-2-8751-2738

### Tokyo

Tel.+81-3-5202-7112  
FAX.+81-3-5202-7105

### Seoul

Tel.+82-2-6237-0777  
FAX.+82-2-6237-0778

### Singapore

Tel.+65-6296-3388  
FAX.+65-6296-3390

### California

Tel.+1-408-321-9660  
FAX.+1-408-321-9308

### Chicago

Tel.+1-847-545-6700  
FAX.+1-847-545-6720

