



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

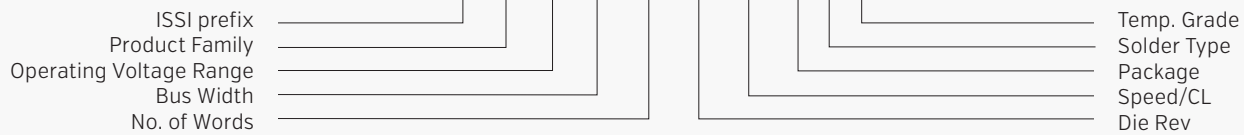
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## IS 46 DR 16 320 D-25D B L A2



### • Product Family

- 41 = Asynchronous
- 42 = SDR Commercial/Industrial grade
- 43 = DDR/DDR2/DDR3 Commercial/Industrial grade
- 45 = SDR Automotive grade
- 46 = DDR/DDR2/DDR3 Automotive grade

### • Operating Voltage Range

- Asynchronous: Fast Page and EDO
- C = 5V
- LV = 3.3V

### Synchronous

- S = 3.3V SDR
- SM/RM/VM = 3.3V/2.5V/1.8V mobile SDR
- VS = 1.8V SDR
- R = 2.5V DDR or 2.5V SDR
- LR = 1.8V mobile DDR (LPDDR)
- DR = DDR2
- LD = LPDDR2
- TR = DDR3

### • Bus Width

- 8 = x8
- 16 = x16
- 32 = x32

### • No. of Words

- 100 = 1M
- 200 = 2M
- 400 = 4M
- 800 = 8M
- 160 = 16M
- 320 = 32M
- 640 = 64M
- 128 = 128M
- 256 = 256M
- 512 = 512M

### • Die Rev.

- A - Z

### • Speed

- 7 = up to 143Mhz
- 6 = up to 166Mhz
- 75 = up to 133Mhz
- 5 = up to 200Mhz
- 37 = up to 266Mhz
- 3 = up to 333Mhz
- 25 = up to 400Mhz
- 187 = up to 533Mhz [DDR3 -1066]
- 15 = up to 667Mhz [DDR3 -1333]
- 125 = up to 800Mhz [DDR3-1600]
- 107 = up to 933 Mhz [DDR3-1866]
- 093 = up to 1066 Mhz [DDR3-2133]

### • CL (CAS Latency)

- B = 3, C = 4, D = 5, E = 6,
- F = 7, G = 8, H = 9, J = 10,
- K = 11, L = 12, M = 13, N = 14
- [Not all speeds and CL's available for all products.]

### • Solder Type

- [Blank] = Sn/Pb
- L = 100% matte Sn for non-BGA
- L = SnAgCu for BGA

### • Temp. Grade

- Blank = Commercial Grade [0C to +70°C]
- I = Industrial Grade [-40C to +85°C]
- A1 = Automotive Grade [-40C to +85°C]
- A2 = Automotive Grade [-40C to +105°C]
- A25 = Automotive Grade [-40C to +115°C]

#### Notes :

1. Ambient temperature limits shown for most products.
2. For DDR2 and DDR3, refer to the case temperature specifications.

### • Package

- B = BGA
- CT = Copper TSOP
- T = TSOP
- BP = PoP BGA
- K = SOJ