



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!



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MA2C840 (MA840)

Silicon epitaxial planar type

For AFC of UHF and VHF electronic tuners

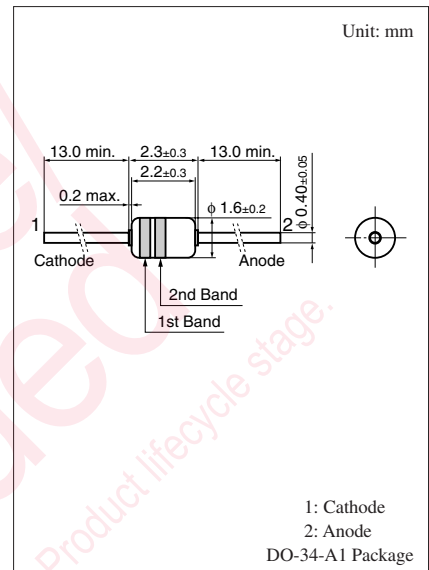
■ Features

- Extra-small DHD envelope, allowing to insert a 5 mm pitch hole
- Small series resistance r_D
- Large variable capacitance range

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	32	V
Maximum peak reverse voltage *	V_{RM}	34	V
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

Note) *: $R_L = 2.2\text{ k}\Omega$, 1 pulse



■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 100\text{ mA}$			1.1	V
Reverse current	I_R	$V_R = 30\text{ V}$			10	nA
Diode capacitance	$C_{D(2V)}$	$V_R = 2\text{ V}, f = 1\text{ MHz}$	10.5		16.0	pF
	$C_{D(10V)}$	$V_R = 10\text{ V}, f = 1\text{ MHz}$	3.3		5.7	pF
Capacitance ratio *	$C_{D(2V)} / C_{D(10V)}$		2.5		3.4	—
Series resistance	r_D	$C_D = 9\text{ pF}, f = 470\text{ MHz}$			1.2	Ω

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

2. Absolute frequency of input and output is 470 MHz.

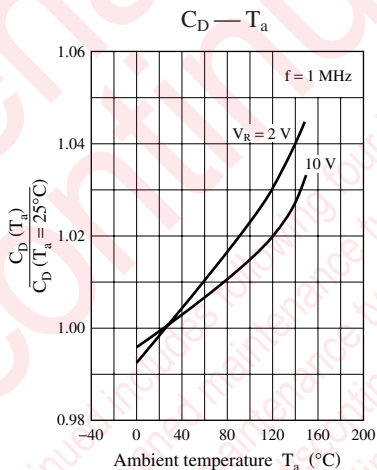
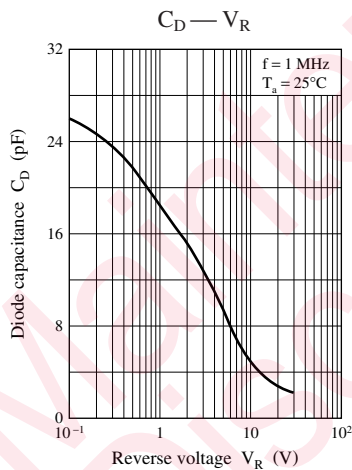
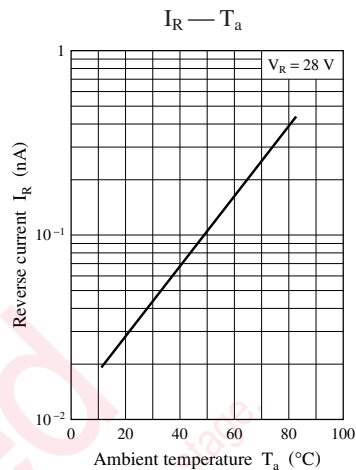
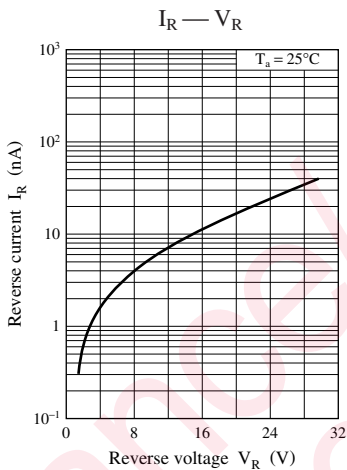
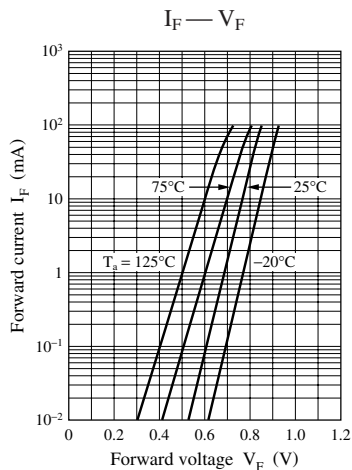
3. *: Rank classification

Rank	A	B
$C_{D(2V)} / C_{D(10V)}$	2.5 to 3.0	2.8 to 3.4

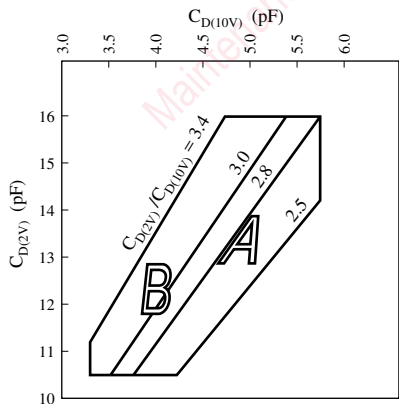
■ Cathode Mark

Class	A	B
1st band	Light Blue	Light Blue
2nd band	White	Green

Note) The part number in the parenthesis shows conventional part number.



C_D rank classification



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