MA2C840 (MA840)

Silicon epitaxial planar type

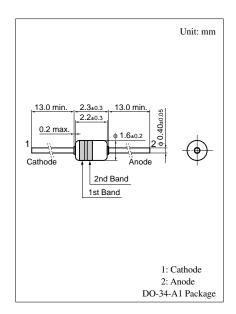
For AFC of UHF and VHF electronic tuner

Features

- Super-small envelope (DO-34), allowing to insert a 5 mm pitch hole
- \bullet Small series resistance $r_{\rm D}$
- Large variable capacitance range

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

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V _R	32	V
Peak reverse voltage	V _{RM}	34	V
Junction temperature	Tj	150	°C
Storage temperature	T _{stg}	-55 to +150	°C



Electrical Characteristics $T_a = 25^{\circ}C$

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage (DC)	V _F	$I_F = 100 \text{ mA}$			1.1	V
Reverse current (DC)	I _R	$V_{R} = 30 V$			10	nA
Terminal capacitance	Ct	$V_{R} = 2 V, f = 1 MHz$	10.5		16	pF
		$V_{R} = 10 V, f = 1 MHz$	3.3		5.7	
Capacitance ratio *	C _{t(2V)} /C _{t(10V)}		2.5		3.4	_
	C _{t(6V)} /C _{t(10V)}		1.64			
Series resistance	r _D	$C_{\rm D} = 9 \text{ pF}, \text{ f} = 470 \text{ MHz}$			1.2	Ω

Note) 1. Rated input/output frequency: 470 MHz

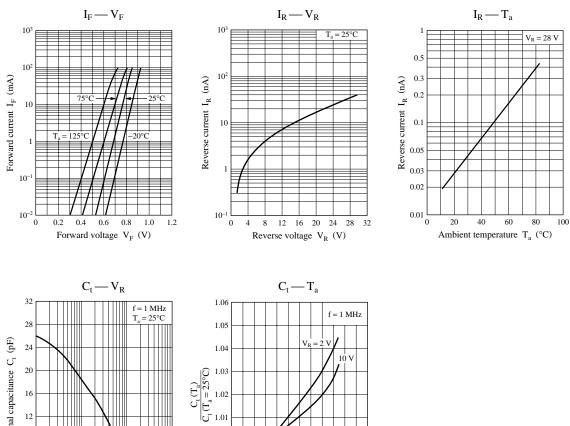
2. *: $C_{t(2V)}/C_{t(10V)}$, $C_{t(6V)}/C_{t(10V)}$ rank classification table

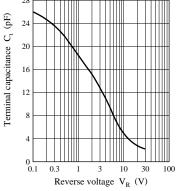
Class	А	В	М
C _{t(2V)} /C _{t(10V)}	2.5 to 3.0	2.8 to 3.4	2.8 to 3.4
Ct(6V)/Ct(10V)	_		>1.64

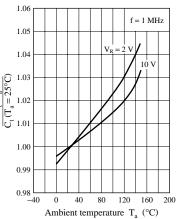
Cathode Mark

Class	A	В	М
1st band	Light Blue	Light Blue	Light Blue
2nd band	White	Green	Light Blue

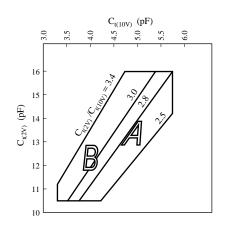
Note) The part number in the parenthesis shows conventional part number.







Ct rank classification



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