

MA353

Silicon Epitaxial Planar Type

CATV Tuner

■ Features

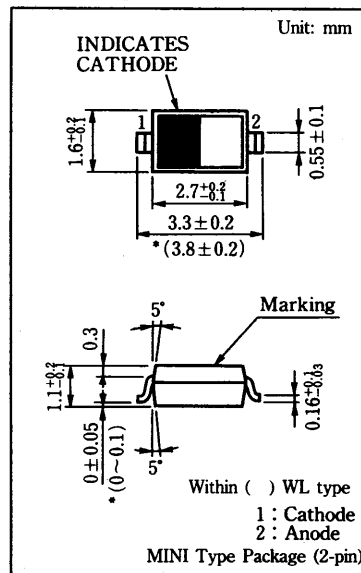
- Wide capacitance ratio
- Mini type package suitable for small size equipment, taped types available for automatic insertion

■ Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value	Unit
Reverse Voltage (DC)	V_R	32	V
Peak Reverse Voltage	V_{RM}^*	35	V
Forward Current (DC)	I_F	20	mA
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55 ~ +150	°C

* $R_L=10k\Omega$

■ Package Dimensions

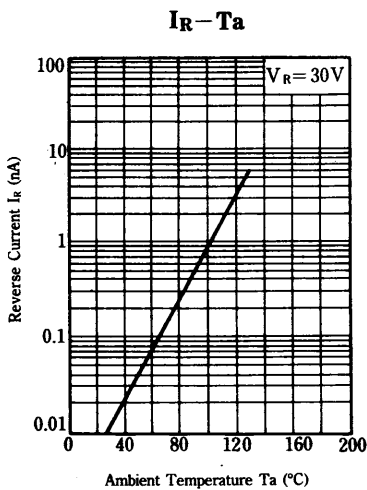
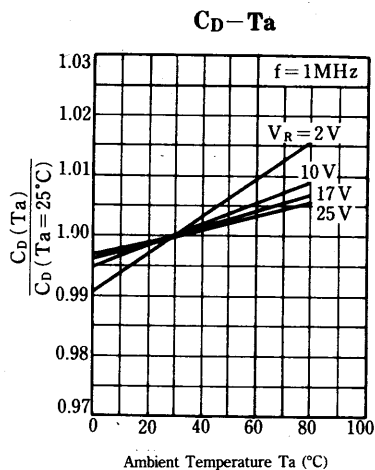
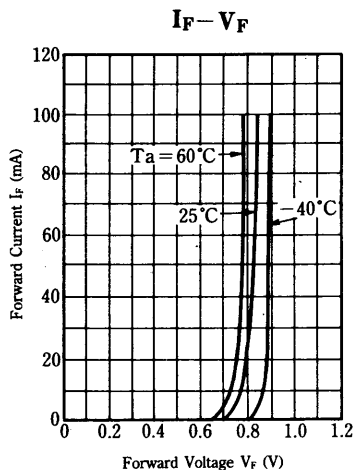
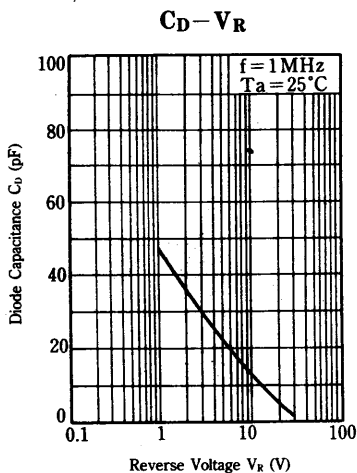


Marking Symbol : 6 S

■ Electrical Characteristics (Ta=25°C)

Item	Symbol	Condition	min.	typ.	max.	Unit
Reverse Current (DC)	I_R	$V_R=30V$			10	nA
Diode Capacitance	$C_{D(2V)}$	$V_R=2V, f=1MHz$	34		38.67	pF
	$C_{D(25V)}$	$V_R=25V, f=1MHz$	2.596		3.195	pF
	$C_{D(10V)}$	$V_R=10V, f=1MHz$	8.010		11.982	pF
	$C_{D(17V)}$	$V_R=17V, f=1MHz$	3.514		5.274	pF
Capacitance Ratio	$C_{D(2V)}/C_{D(25V)}$		11.9	12.5		
Diode Capacitance Deflection	ΔC	$C_{D(2V)(10V)(17V)(25V)}$			2.5	%
Series Resistance	r_D	$C_D=9pF, f=470MHz$			0.75	Ω

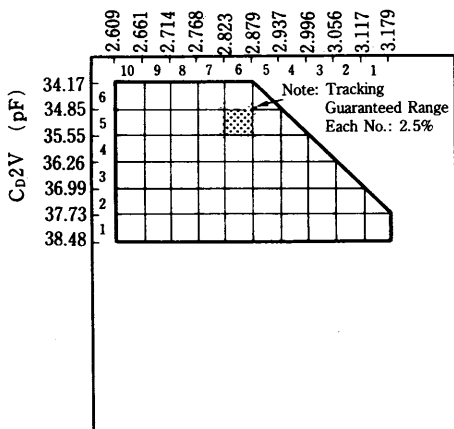
© Input and output frequency of ratings: 470MHz



CD Classifications

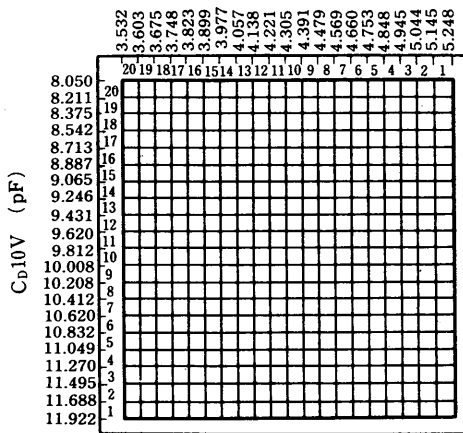
First Classification

C_{D25V} (pF)



Second Classification

C_{D17V} (pF)



MA363

Silicon Epitaxial Planar Type

Electronic Tuner

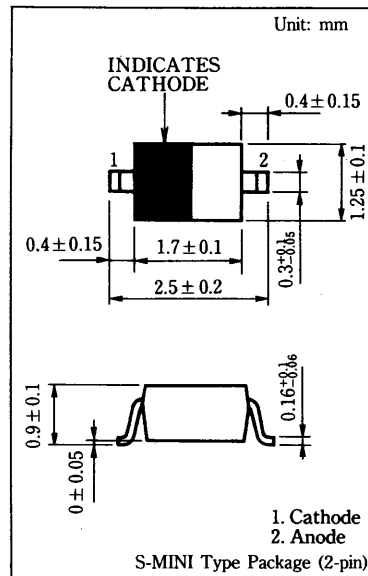
■ Features

- Wide capacitance ratio
- Small r_D
- S-Mini type package suitable for small size equipment, taped types available for automatic insertion

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

Item	Symbol	Value	Unit
Reverse Voltage (DC)	V_R	30	V
Peak Reverse Voltage	V_{RM}	34	V
Forward Current (DC)	I_F	20	mA
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 ~ +150	$^\circ\text{C}$

■ Package Dimensions



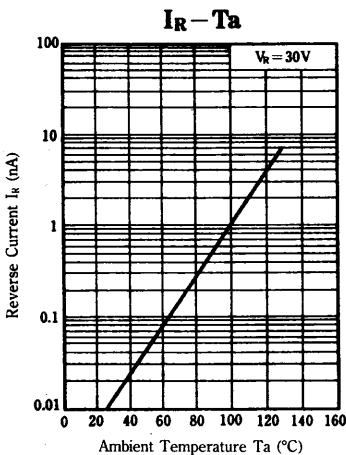
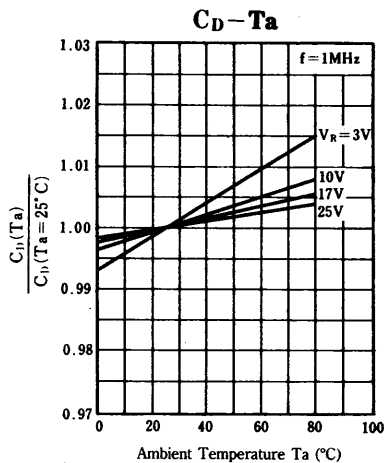
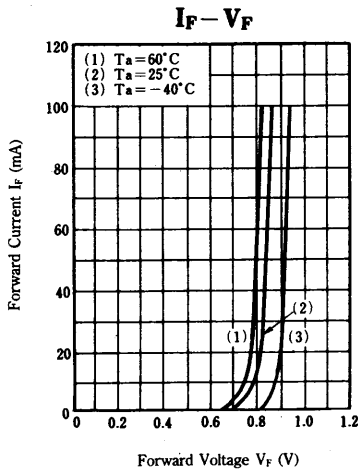
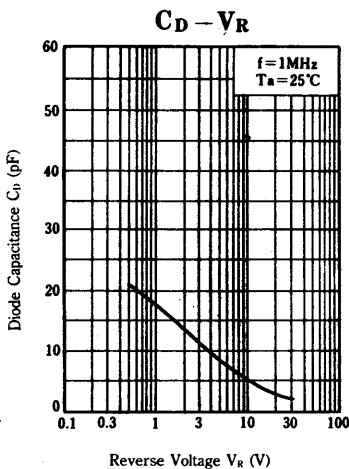
Marking Symbol : 6D

■ Electrical Characteristics ($T_a=25^\circ\text{C}$)

Item	Symbol	Condition	min.	typ.	max.	Unit
Reverse Current (DC)	I_R	$V_R=30\text{ V}$			10	nA
Forward Voltage (DC)	V_F	$I_F=100\text{ mA}$			0.92	V
Diode Capacitance	$C_{D(3V)}$	$V_R=3\text{ V}, f=1\text{ MHz}$	11.233		12.781	pF
	$C_{D(25V)}$	$V_R=25\text{ V}, f=1\text{ MHz}$	2.020		2.367	pF
	$C_{D(10V)}$	$V_R=10\text{ V}, f=1\text{ MHz}$	4.358		5.422	pF
	$C_{D(17V)}$	$V_R=17\text{ V}, f=1\text{ MHz}$	2.567		3.100	pF
Capacitance Ratio	$C_{D(3V)}/C_{D(25V)}$		4.60		6.15	
Capacitance Difference	$C_{D(17V)}-C_{D(25V)}$		0.37			pF
Diode Capacitance Deflection	ΔC	$C_{D(3V)}(10V)(17V)(25V)$			2	%
Series Resistance	r_D	$C_D=9\text{ pF}, f=470\text{ MHz}$	0.38		0.72	Ω

■ Marking Symbol





C_D Classifications

