〈SMALL-SIGNAL DIODE〉

MC2836

FOR HIGH SPEED SWITCHING APPLICATION
SILICON EPITAXIAL TYPE(COMMON ANODE)

DESCRIPTION

MC2836 is a super mini package plastic seal type silicon epitaxial type double diode, especially designed for high speed switching application.

Due to the small pin capacitance, short switching time (reverse recovery time), It is most suitable for high speed switching application and limitter, clipper application.

FEATURE

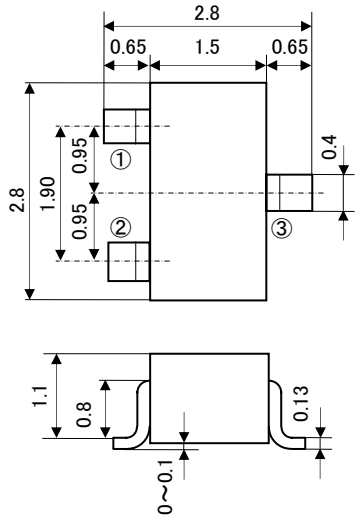
- ●Small pin capacitance
- ●Quick switching time
- ●High voltage
- ●Series connected two elements
- ●Good two element characteristics
- ●Double and super mini package for mounting

APPLICATION

For general high speed switching of audio machine, VTR.

OUTLINEDRAWING

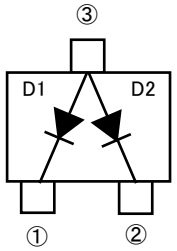
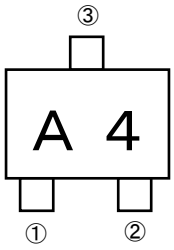
Unit:mm



JEITA:SC-59
JEDEC:Similar to TO-236
TERMINAL CONNECTER
①:CATHODE 1
②:CATHODE 2
③:ANODE (COMMON)

MAXIMUM RATINGS(Ta=25℃)

Symbol	Parameter	Ratings	Unit
V_{RM}	Peak reverse voltage	75	V
V_R	DC reverse voltage	50	V
I_{FSM}	Surge current(1μs)	4	A
I_{FM}	Peak forward current	300	mA
I_O	Average rectification current	100	mA
P_T	Total allowance dissipation	200	mW
T_j	Junction temperature	+150	℃
Tstg	Storage temperature	−55～+150	℃

INTERNAL CONNECTION	MARKING
	

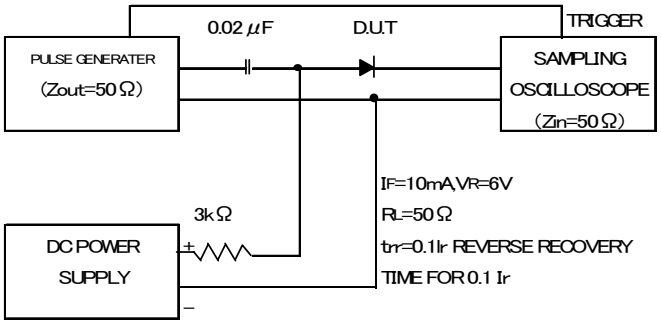
ELECTRICAL CHARACTERISTICS(Ta=25℃)

Parameter	Symbol	Test conditions	Limits			Uniit
			Min	Typ	Max	
Forward voltage	V_{F1}	I_F=10mA	−	0.77	0.9	V
	V_{F2}	I_F=50mA	−	0.90	1.0	
	V_{F3}	I_F=100mA	−	0.95	1.2	
Reverse current	I_R	V_R=50V	−	−	0.1	μA
Pin capacitance	C_t	V_R=0V, f=1MHz	−	2.8	4.0	pF
Reverse recovery time	trr	(Refer to test circuit)	−	−	4.0	ns

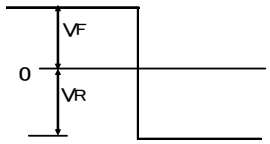
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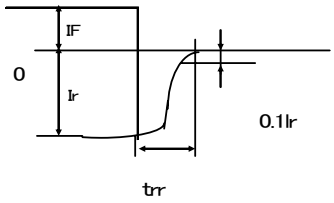
REVERSE RECOVERY TIME(trr)TEST CIRCUIT



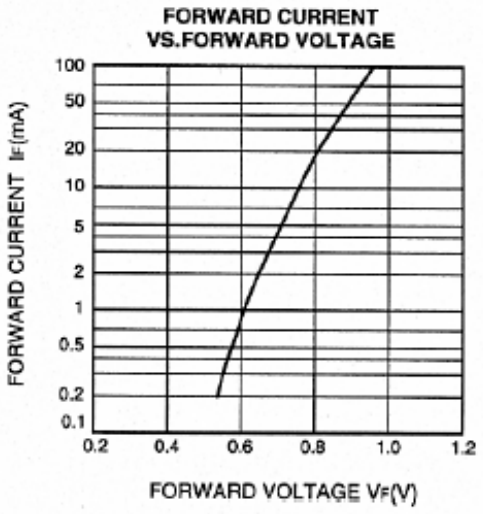
● INPUT VOLTAGE WAVE FORM

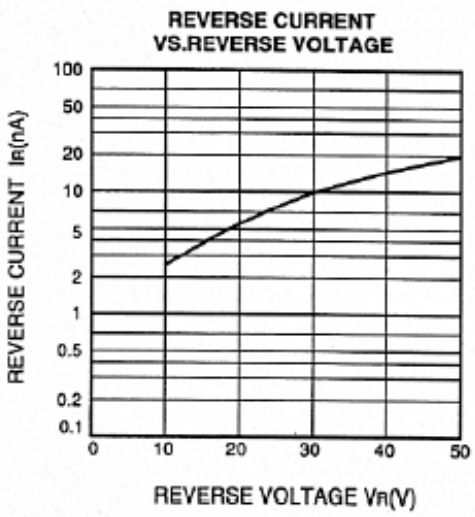


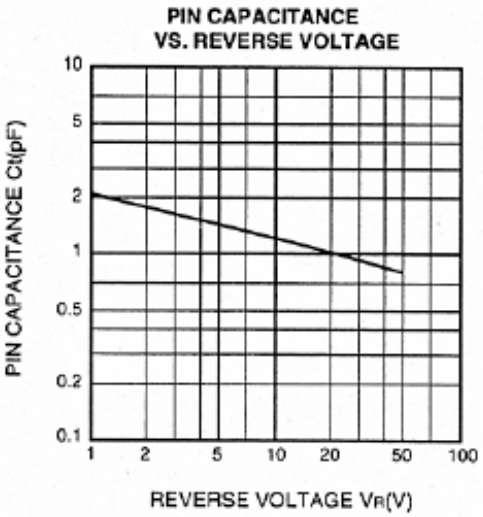
●CURRENT WAVE FORM IN DIODE

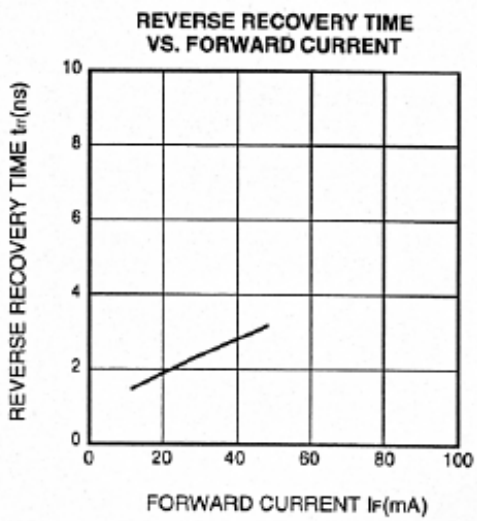


TYPICAL CHARACTERISTICS









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Jun.2013