

RT3DKAM

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

DESCRIPTION

RT3DKAM is a super mini package plastic seal type silicon epitaxial type composite diode, built with Anode common MC2836 and Cathode common MC2838.

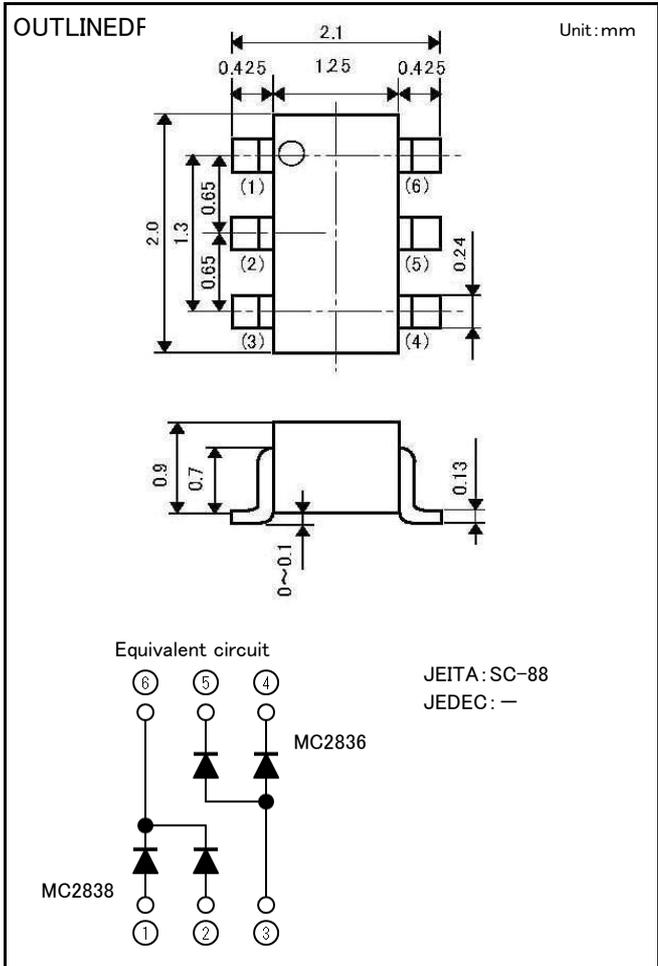
Due to the small pin capacitance, short switching time(reverse recovery time),It is most suitable for high speed switching application and limiter,clipper application.

FEATURE

- Small pin capacitance
- Quick switching time
- High voltage
- Quadruple diodes and super mini package for mounting

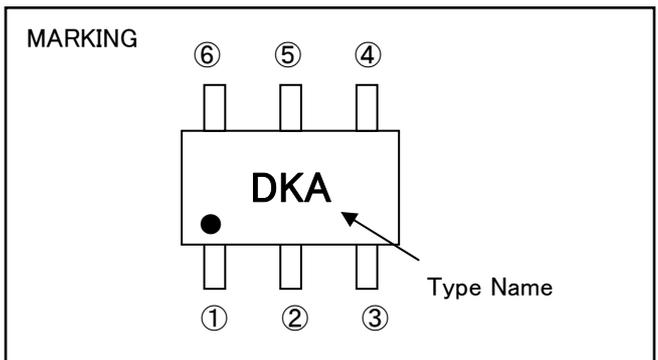
APPLICATION

For general high speed switching of audio machine,VCR.



MAXIMUM RATINGS (Ta=25°C)

Symbol	Parameter	Ratings	Unit
V_{RM}	Peak reverse voltage	85	V
V_R	DC reverse voltage	80	V
I_{FSM}	Surge current (1 μ s)	4	A
I_{FM}	Peak forward current	300	mA
I_O	Average rectification current	100	mA
P_T	Total allowance dissipation (Ta=25°C)	200	mW
T_j	Junction temperature	+150	°C
Tstg	Storage temperature	-55~+150	°C



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ELECTRICAL CHARACTERISTICS MC2836 (Ta=25°C)

Parameter	Symbol	Test conditions	Limits			Unit
			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 _{R1}	V _R =75V	-	-	0.1	μA
	I _{R2}	V _R =80V	-	-	0.5	
Pin capacitance	C _t	V _R =0V, f=1MHz	-	2.8	4.0	pF
Reverse recovery time	t _{rr}	(Refer to test circuit)	-	-	4.0	ns

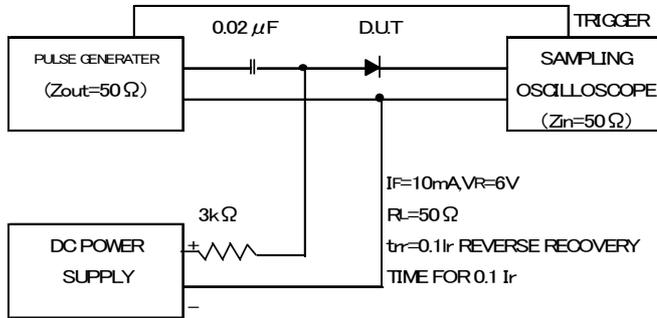
ELECTRICAL CHARACTERISTICS MC2838 (Ta=25°C)

Parameter	Symbol	Test conditions	Limits			Unit
			Min	Typ	Max	
Forward voltage	V _{F1}	I _F =10mA	-	0.72	0.9	V
	V _{F2}	I _F =50mA	-	0.85	1.0	
	V _{F3}	I _F =100mA	-	0.90	1.2	
Reverse current	I _{R1}	V _R =75V	-	-	0.1	μA
	I _{R2}	V _R =80V	-	-	0.5	
Pin capacitance	C _t	V _R =0V, f=1MHz	-	1.3	4.0	pF
Reverse recovery time	t _{rr}	(Refer to test circuit)	-	-	3.0	ns

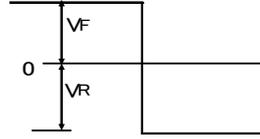
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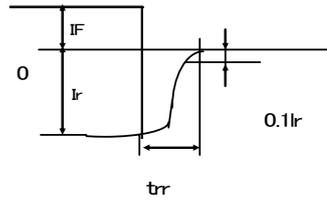
MC2836 Reverse recovery time (t_{rr}) test circuit



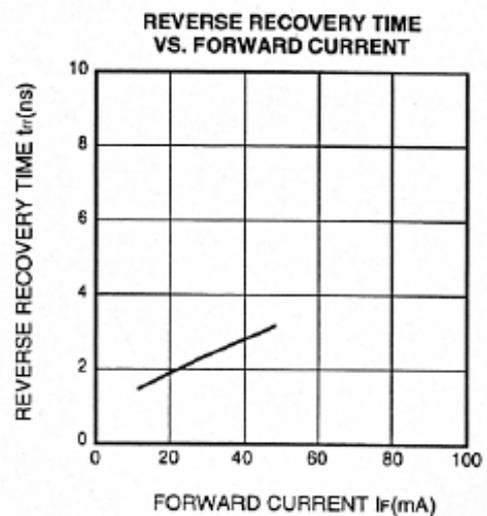
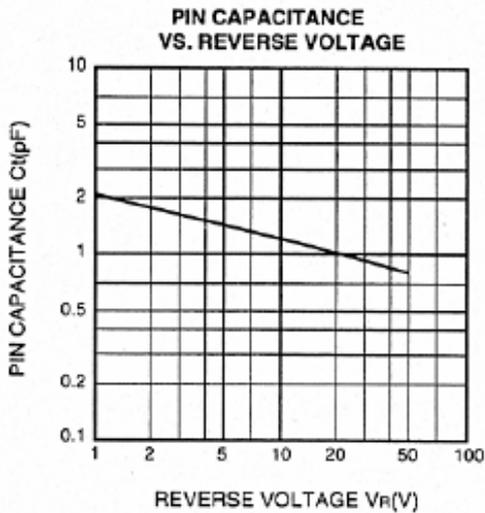
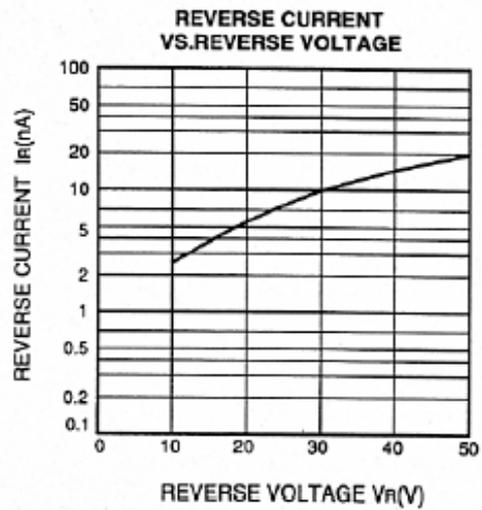
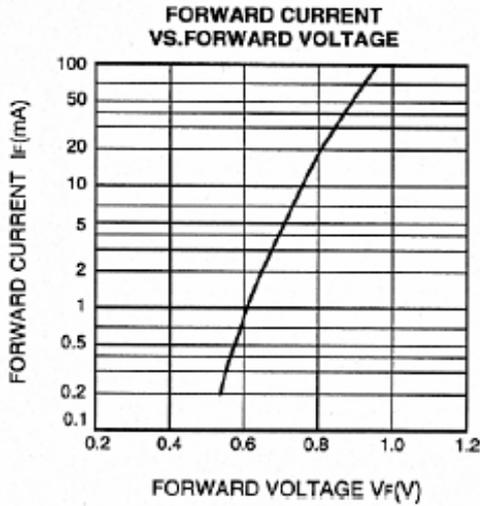
● INPUT VOLTAGE WAVE FORM



● CURRENT WAVE FORM IN DIODE



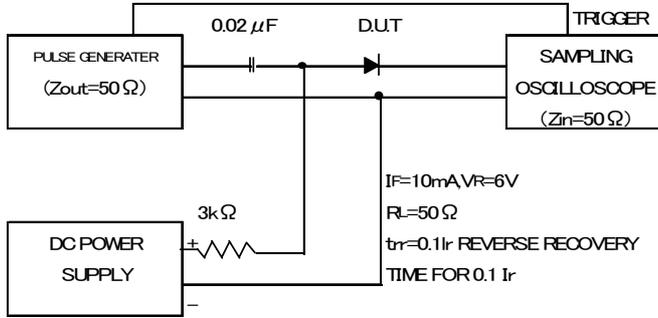
MC2836 TYPICAL CHARACTERISTICS



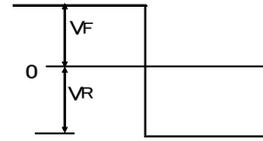
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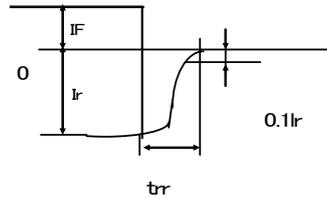
MC2838 Reverse recovery time (t_{rr}) test circuit



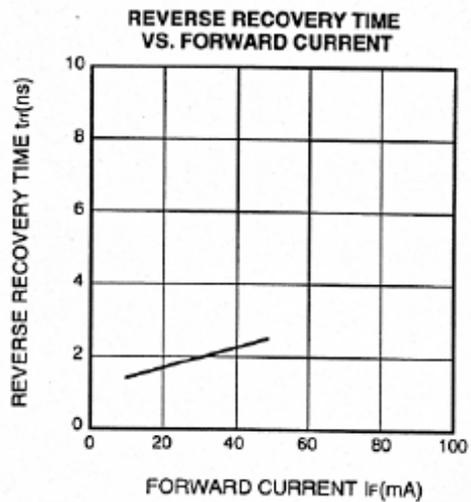
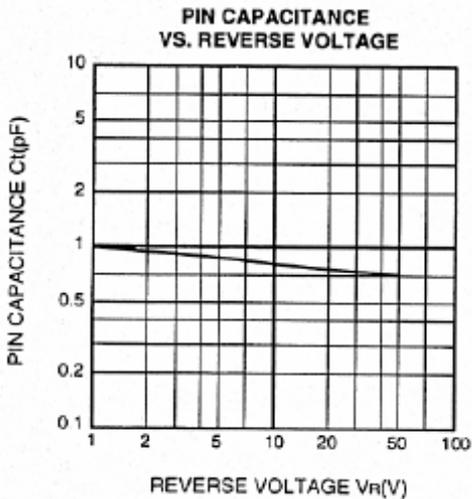
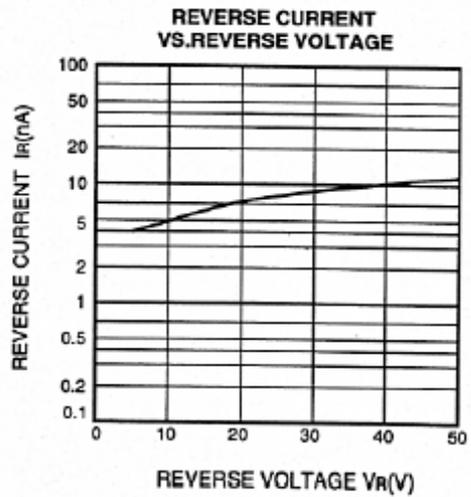
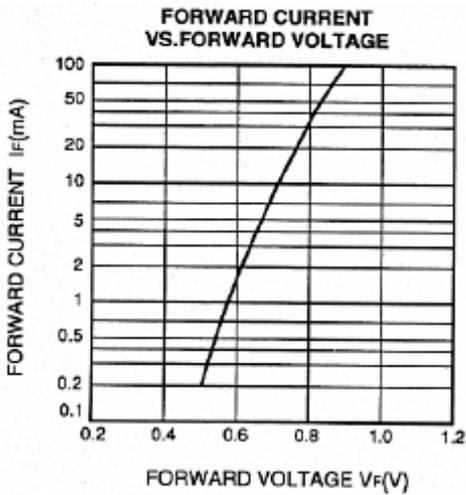
● INPUT VOLTAGE WAVE FORM



● CURRENT WAVE FORM IN DIODE



MC2838 TYPICAL CHARACTERISTICS





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