

# Switching diode

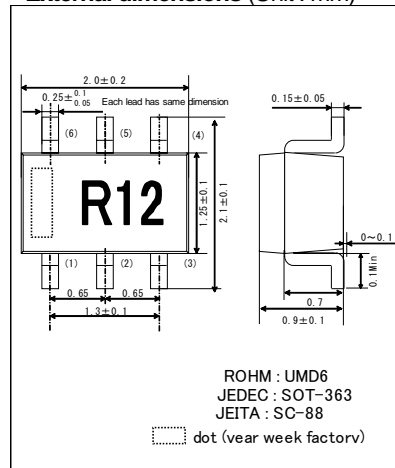
## UMR12N

**●Applications**  
Ultra high speed switching

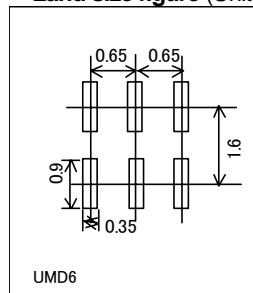
**●Features**  
1) Small mold type. (SMD6)  
2) High reliability

**●Construction**  
Silicon epitaxial planar

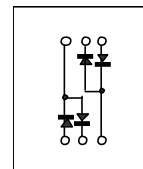
**●External dimensions (Unit : mm)**



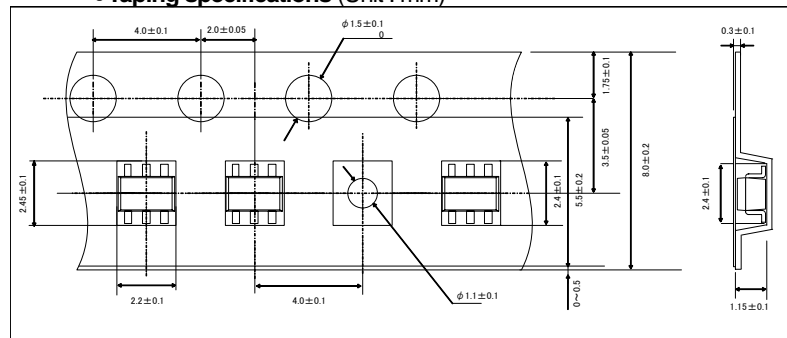
**●Land size figure (Unit : mm)**



**●Structure**



**●Taping specifications (Unit : mm)**



**●Absolute maximum ratings (Ta=25°C)**

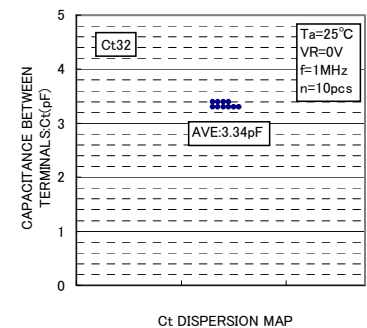
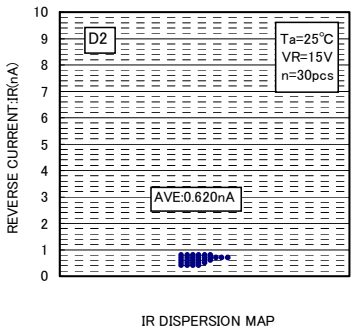
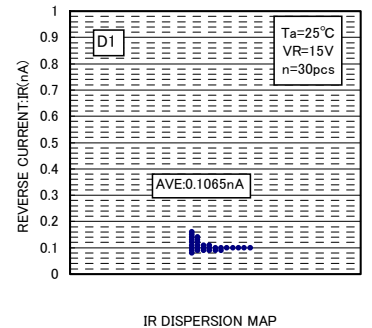
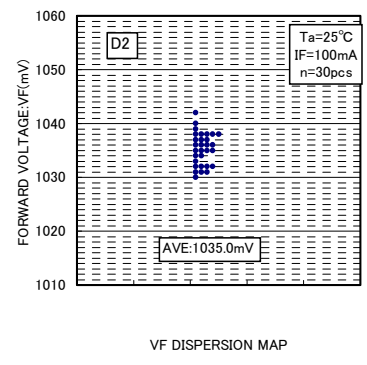
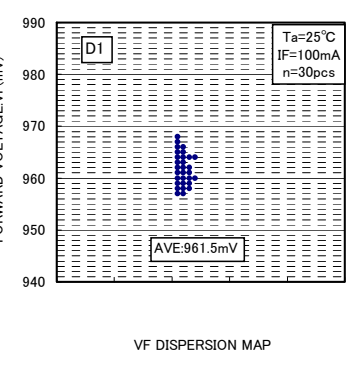
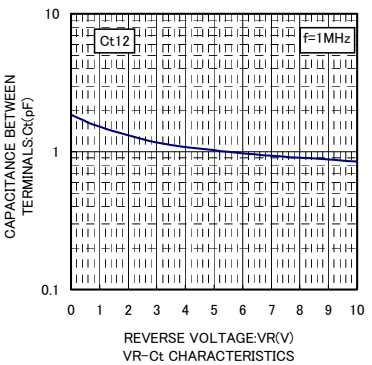
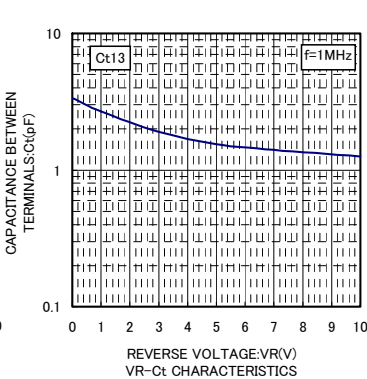
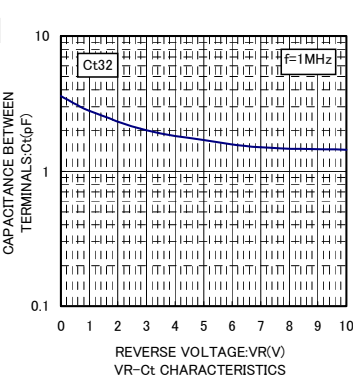
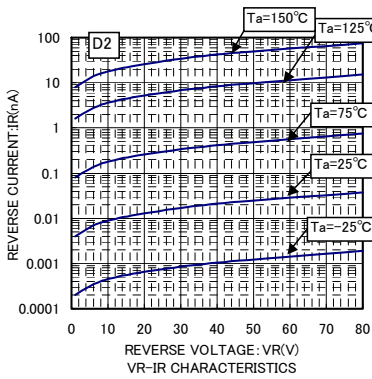
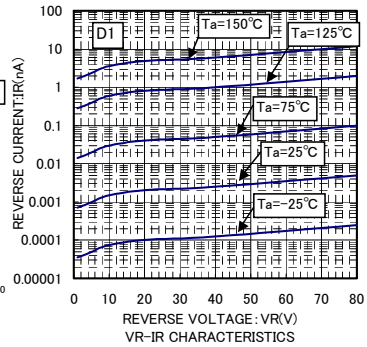
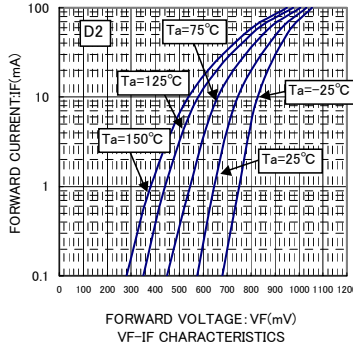
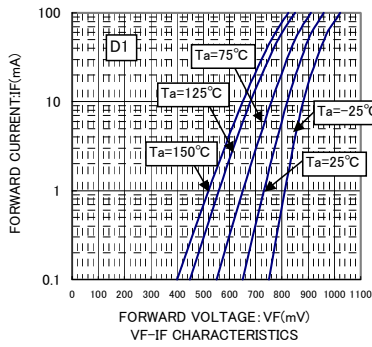
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	$V_{RM}$	80	V
Reverse voltage (DC)	$V_R$	80	V
Forward current (Single)	$I_{FM}$	200	mA
Average rectified forward current (Single)	$I_o$	100	mA
Surge current (t=1us)	$I_{surge}$	4	A
Power dissipation	$P_d$	200	mW
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

**●Electrical characteristics (Ta=25°C)**

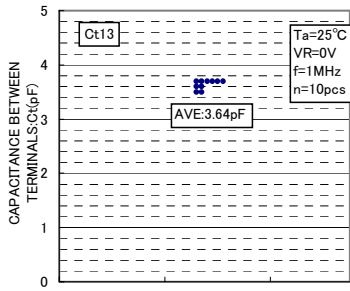
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	-	-	1.2	V	$I_F=100mA$
Reverse current	$I_R$	-	-	0.1	μA	$V_R=80V$
Capacitance between terminals	$C_t$	-	-	3.5	pF	$V_R=6V, f=1MHz$

Diodes

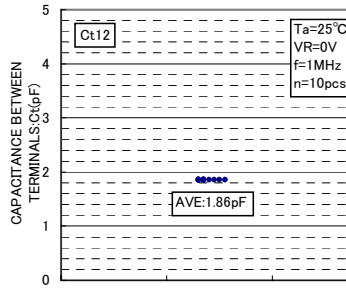
●Electrical characteristic curves (Ta=25°C)



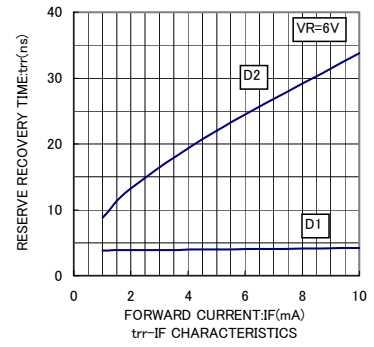
Diodes



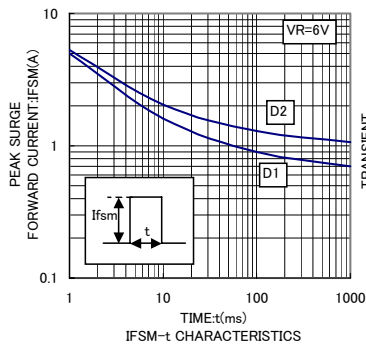
Ct DISPERSION MAP



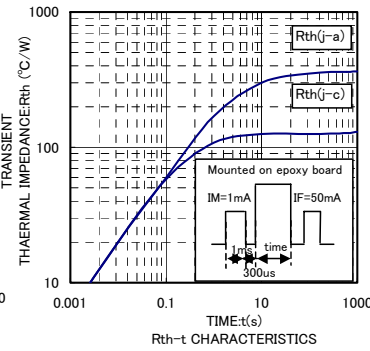
Ct DISPERSION MAP



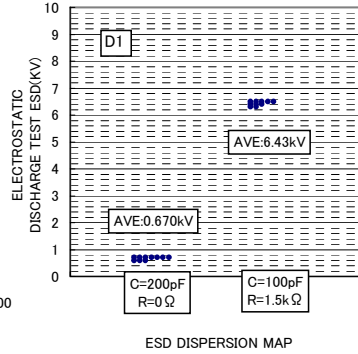
trr-IF CHARACTERISTICS



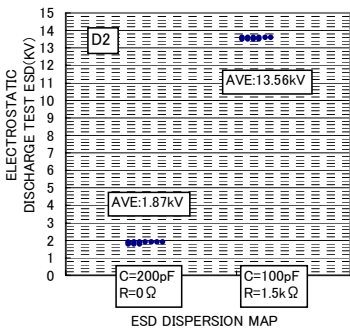
IFSM-t CHARACTERISTICS



Rth-t CHARACTERISTICS



ESD DISPERSION MAP



ESD DISPERSION MAP

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