# Band switching diode

# **DAP236U**

#### Applications

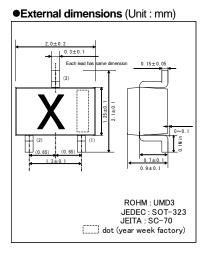
High speed switching

#### ●Features

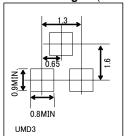
- 1) Ultra small mold type. (UMD3)
- 2) High reliability.

#### ●Construction

Silicon epitaxial planar



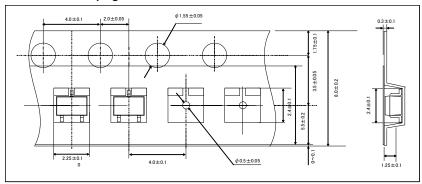
## ●Land size figure (Unit : mm)



#### ●Structure



### Taping dimensions



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

Parameter	Symbol	Limits	Unit
Power dissipation	Pd	150	mW
Reverse voltage (DC)	$V_R$	35	V
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-55 to +125	°C

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

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Forward voltage	$V_{F}$	-	-	1.0	V	I <sub>F</sub> =10mA
Reverse current	I <sub>R</sub>	-	-	10	nA	V <sub>R</sub> =25V
Capacitance between terminal	Ct	-	-	1.2	pF	V <sub>R</sub> =6V , f=1MHz
Forward operating resistance	rf	-	-	0.9	Ω	I <sub>F</sub> =2mA , f=100MHz

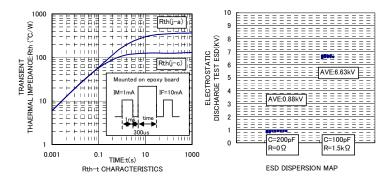
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#### ●Electrical characteristic curves (Ta=25°C) ########### REVERSE CURRENT:IR(nA) 1000 1000 1000 FORWARD CURRENT:IF(mA) CAPACITANCE BETWEEN TERMINALS:Ct(pF) 0.1 0.0001 10 15 20 0 300 400 500 600 700 800 900 100 110 120 FORWARD VOLTAGE: VF(mV) 0 0 30 50 REVERSE VOLTAGE: VR(V) REVERSE VOLTAGE:VR(V) VF-IF CHARACTERISTICS VR-IR CHARACTERISTICS VR-Ct CHARACTERISTICS 10 0.09 Ta=25°C Ta=25°C VR=25V IF=10mA FORWARD VOLTAGE:VF(mV) 0.08 FORWARD OPERATING RESISTANCE:rf(Ω) REVERSE CURRENT:IR(nA) n=30pcs n=30pcs 0.07 0.06 840 830 0.03 820 0.02 AVE:829.3mV 0.01 810 0.1 0.01 10 FORWARD CURRENT:IF(mA) VF DISPERSION MAP IR DISPERSION MAP rf-IF CHARACTERISTICS Ta=25°C 0.9 Ta=25°C VR=6V RESERVE RECOVERY TIME:trr(ns) VR=6V PEAK SURGE FORWARD CURRENT:IFSM(A) 0.8 RL=100 Ω n=10pcs Irr=0.1\*IR AVE:5.60A AVE:1.20ns 0.1 0 Ct DISPERSION MAP IFSM DISRESION MAP trr DISPERSION MAP Ta=25°C f=100MH; 0.9 0.8 PEAK SURGE FORWARD CURRENT:IFSM(A) PEAK SURGE FORWARD CURRENT:IFSM(A) IF=2mA 1=10pcs 8.3ms 8.3ms 0.2 0.1 AVE:0.602 Ω 100 100 TIME:t(ms) NUMBER OF CYCLES IFSM-CYCLE CHARACTERISTICS FORWARD CURRENT:IF(mA) IFSM-t CHARACTERISTICS rf DISPERSION MAP





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Appendix1-Rev1.1