Switching diode

1SS355

Applications

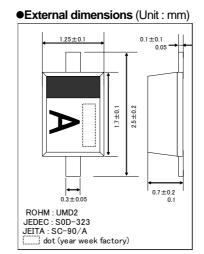
High speed switching

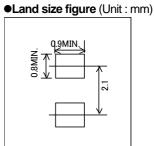
Features

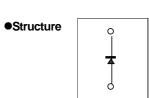
- 1) Ultra small mold type.(UMD2)
- 2) High reliability.

Construction

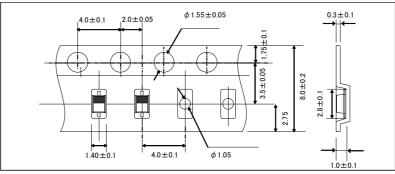
Silicon epitaxial planar







● Taping specification (Unit: mm)



● Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V_{RM}	90	V
Reverse voltage (DC)	V_R	80	V
Forward current	I _{FM}	225	mA
Average rectified forward current	lo	100	mA
Surge current (t=1s)	I _{surge}	500	mA
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Forward voltage	V_{F}	-	-	1.2	V	I _F =100mA
Reverse current	I _R	1	-	0.1	μΑ	V _R =80V
Capacitance between terminals	Ct	-	-	3	pF	V _R =0.5V , f=1MHz
Reverse recovery time	trr	-	-	4	ns	V_R =6V , IF=10mA , RL=100 Ω

●Electrical characteristic curves (Ta=25°C) 西西南南南南 FORWARD CURRENT:IF(mA) REVERSE CURRENT:IR(uA) 1000 1000 1000 CAPACITANCE BETWEEN TERMINALS:Ct(pF) 0.1 0.0001 0.1 0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1 1.1 1.2 0 40 60 120 REVERSE VOLTAGE:VR(V) VR-Ct CHARACTERISTICS REVERSE VOLTAGE: VR(V) VR-IR CHARACTERISTICS FORWARD VOLTAGE: VF(mV) VF-IF CHARACTERISTICS 100 Ta=25°C VR=80V 90 Ta=25 F=100m FORWARD VOLTAGE:VF(mA) 80 0.98 REVERSE CURRENT:IR(nA) 940 CAPACITANCE BETWEEN n=30pcs f=1MHz TERMINALS:Ct(pF) 0.90 0.95 0.94 0.93 70 60 930 50 40 920 30 20 0.92 910 0.91 10 0.9 VF DISPERSION MAP IR DISPERSION MAP Ct DISPERSION MAP Ta=25°C VR=6V RESERVE RECOVERY TIME:trr(ns) PEAK SURGE FORWARD CURRENT:IFSM(A) PEAK SURGE FORWARD CURRENT.IFSM(A) 5 0 0 51 IF=10mA 2 10 1.5 AVE:13.6A AVE:1.3ns 0.5 0 0.1 1 10 NUMBER OF CYCLES IFSM DISRESION MAP trr DISPERSION MAP IFSM-CYCLE CHARACTERISTICS 0.001 TRANSIENT THAERMAL IMPEDANCE:Rth (°C/W) PEAK SURGE FORWARD CURRENT:IFSM(A) → 省重重量 REVERSE POWER DISSIPATION.P_R(W) 90 90 100 10

0.1

TIME:t(s)
Rth-t CHARACTERISTICS

10 100 1000

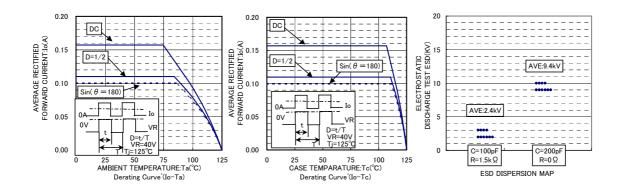
0.001

1 10 TIME:t(ms) IFSM-t CHARACTERISTICS

0.1

20 40 60 80 REVERSE VOLTAGE:VR(V)

VR-P_R CHARACTERISTICS



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