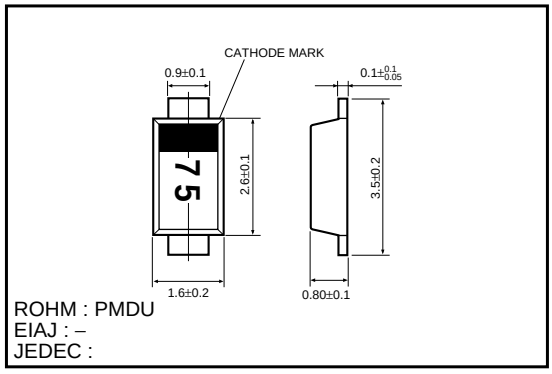
Shottky barrier diode

RSX101M-30

●**Application**
High efficient shottky barrier diode
Rectifier for power supply units
Battery protection against reversal current

●**Features**
1) Small mold type. (PMDU (2616))
2) High reliability.
(ESD resistance typ=12kV (machine model))
3) Low V_F / Low I_R.
(V_F=0.35V at 1A / I_R=90μA at 30V)

●**External dimensions** (Unit : mm)



ROHM : PMDU
EIAJ : –
JEDEC :

●**Structure**
Silicon Epitaxial Planer

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

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V_{RM}	30	V
Reverse voltage (DC)	V_R	30	V
Average rectified forward current	I_O	1	A
Forward peak surge current (60Hz / 1cyc.)	I_{FSM}	45	A
Junction temperature	Tj	150	°C
Storage temperature	Tstg	–40 to 150	°C

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	–	0.35	0.39	V	I_F=1A
Reverse current	I_R	–	90	200	μA	V_R=30V
Capacitance between terminals	C_T	–	60	–	pF	V_R=10V, f=1MHz
Electro static discharge resistance	ESD	–	12	–	kV	C=200pF, R=0Ω 1puls

●**Electrical characteristic curves** (Ta=25°C)

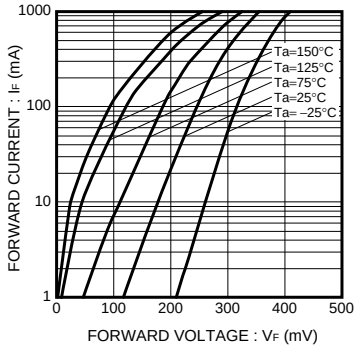


Fig.1 Forward Temperature Characteristics

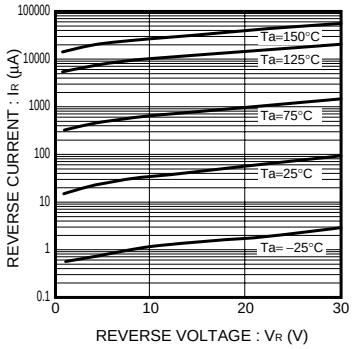


Fig.2 Reverse Temperature Characteristics

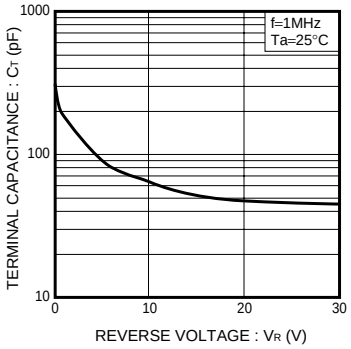


Fig.3 Capacitance Between Terminals Characteristics

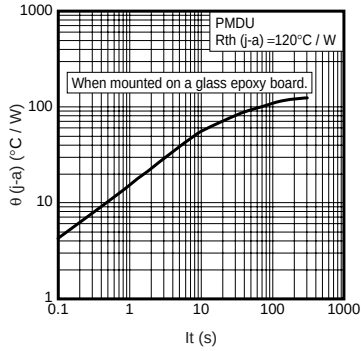


Fig.4 Thermal resistance

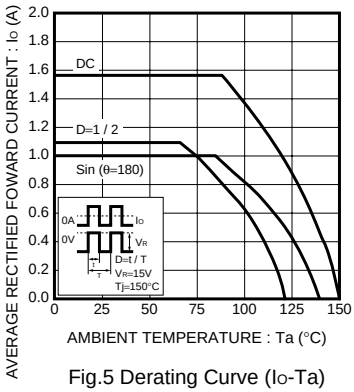


Fig.5 Derating Curve (I_O-Ta)

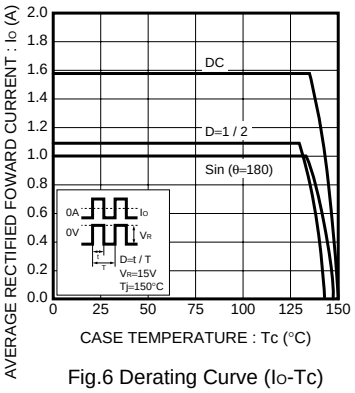


Fig.6 Derating Curve (I_O-Tc)

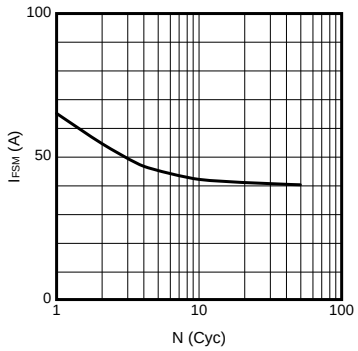


Fig.7 Forward peak surge current (Acctual data)

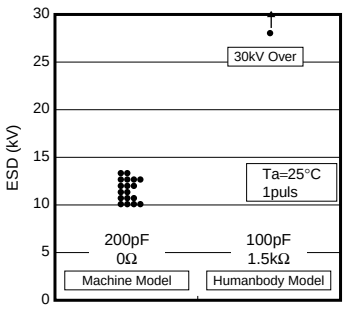


Fig.8 ESD resistance

Notes

- No technical content pages of this document may be reproduced in any form or transmitted by any means without prior permission of ROHM CO.,LTD.
- The contents described herein are subject to change without notice. The specifications for the product described in this document are for reference only. Upon actual use, therefore, please request that specifications to be separately delivered.
- Application circuit diagrams and circuit constants contained herein are shown as examples of standard use and operation. Please pay careful attention to the peripheral conditions when designing circuits and deciding upon circuit constants in the set.
- Any data, including, but not limited to application circuit diagrams information, described herein are intended only as illustrations of such devices and not as the specifications for such devices. ROHM CO.,LTD. disclaims any warranty that any use of such devices shall be free from infringement of any third party's intellectual property rights or other proprietary rights, and further, assumes no liability of whatsoever nature in the event of any such infringement, or arising from or connected with or related to the use of such devices.
- Upon the sale of any such devices, other than for buyer's right to use such devices itself, resell or otherwise dispose of the same, no express or implied right or license to practice or commercially exploit any intellectual property rights or other proprietary rights owned or controlled by
- ROHM CO., LTD. is granted to any such buyer.
- Products listed in this document are no antiradiation design.

The products listed in this document are designed to be used with ordinary electronic equipment or devices (such as audio visual equipment, office-automation equipment, communications devices, electrical appliances and electronic toys).
Should you intend to use these products with equipment or devices which require an extremely high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), please be sure to consult with our sales representative in advance.

About Export Control Order in Japan

Products described herein are the objects of controlled goods in Annex 1 (Item 16) of Export Trade Control Order in Japan.
In case of export from Japan, please confirm if it applies to "objective" criteria or an "informed" (by MITI clause) on the basis of "catch all controls for Non-Proliferation of Weapons of Mass Destruction.