

Schottky barrier diode

RB160M-40

●Application

Low V_F schottky barrier diode
 For switching power supplies
 Battery protection against reversal current

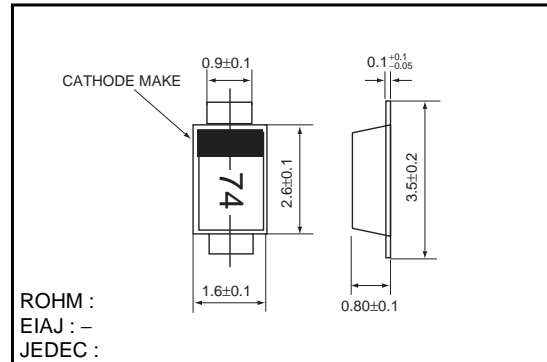
●Features

- 1) Small surface mounting type. (PMDU (2616))
- 2) High reliability.
- 3) Low V_F ($V_F=0.46V$ at 1A).

●Structure

Silicon Epitaxial Planer

●External dimensions (Unit : mm)



●Absolute maximum ratings ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V_{RM}	40	V
Reverse voltage (DC)	V_R	40	V
Average rectified forward current	I_o	1	A
Forward current surge peak (60Hz / 1cyc.)	I_{FSM}	30	A
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-40 to 150	$^\circ\text{C}$

●Electrical characteristics ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	0.46	0.51	V	$I_F=1.0A$
Reverse current	I_R	-	4.0	30	μA	$V_R=40V$

Diodes

●Electrical characteristic curves (Ta=25°C)

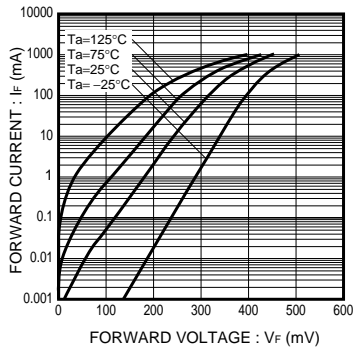


Fig.1 Forward Temperature Characteristics

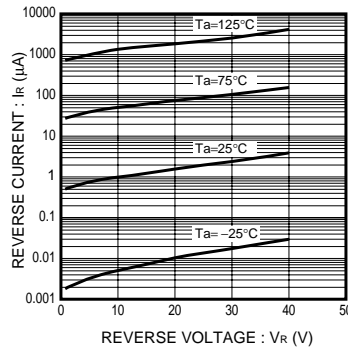


Fig.2 Reverse Temperature Characteristics

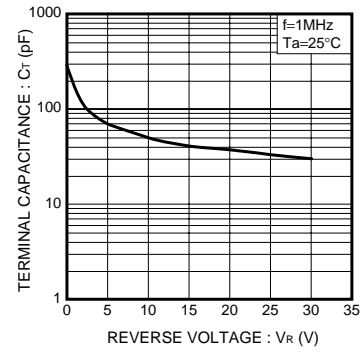


Fig.3 Capacitance Between Terminals Characteristics

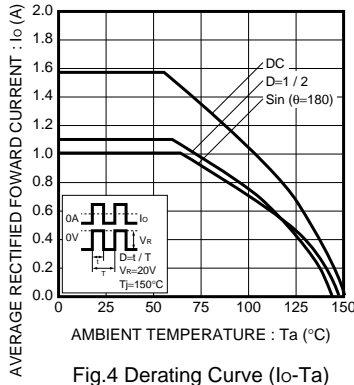


Fig.4 Derating Curve (Io-Ta)

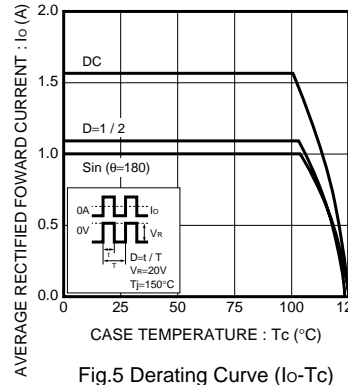


Fig.5 Derating Curve (Io-Tc)

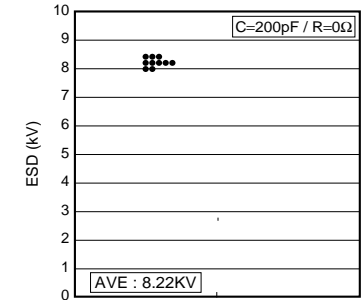


Fig.6 ESD

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