

AEC-Q101 Qualified

●Series

Standard Fast Recovery

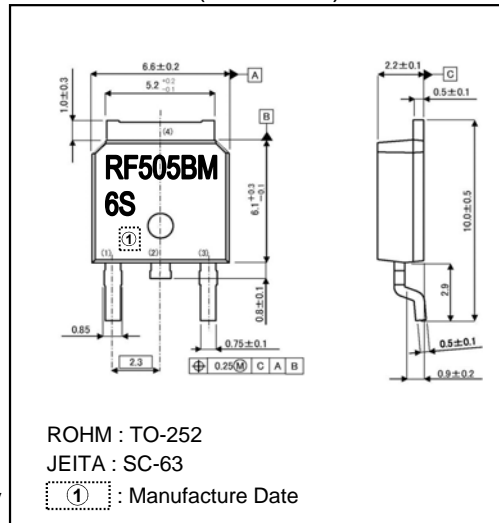
●Application

General rectification

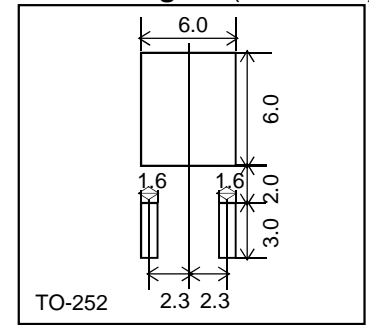
●Features

- 1) Low switching loss
- 2) Low forward voltage
- 3) High current overload capacity

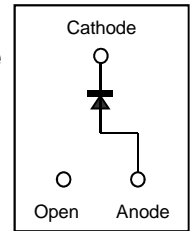
●Dimensions (Unit : mm)



●Land Size Figure (Unit : mm)



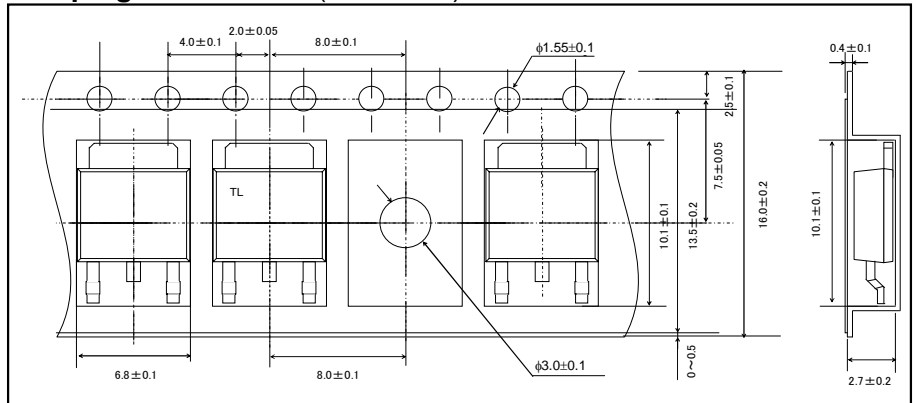
●Structure



●Construction

Silicon epitaxial planar type

●Taping Dimensions (Unit : mm)



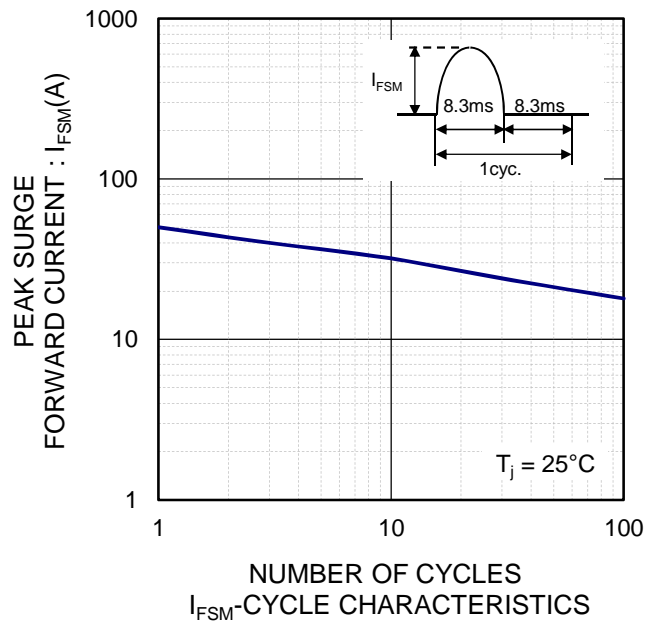
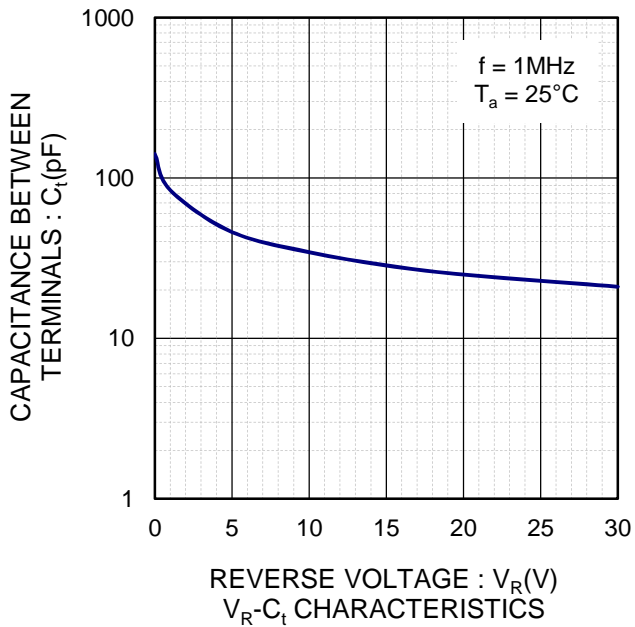
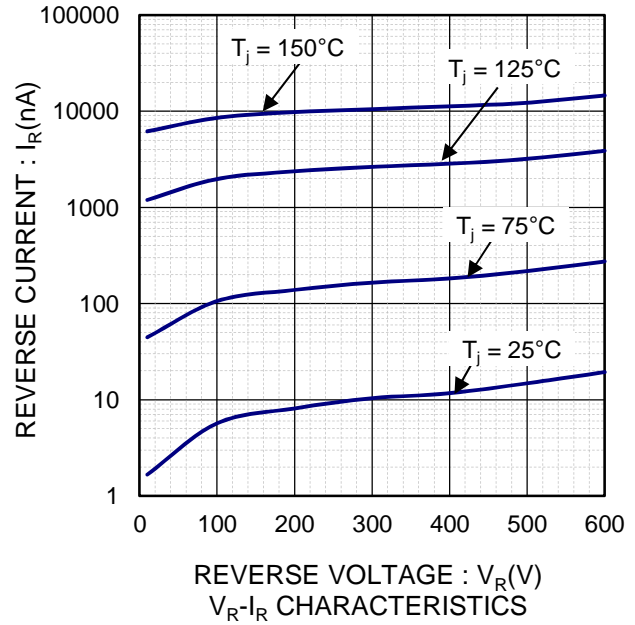
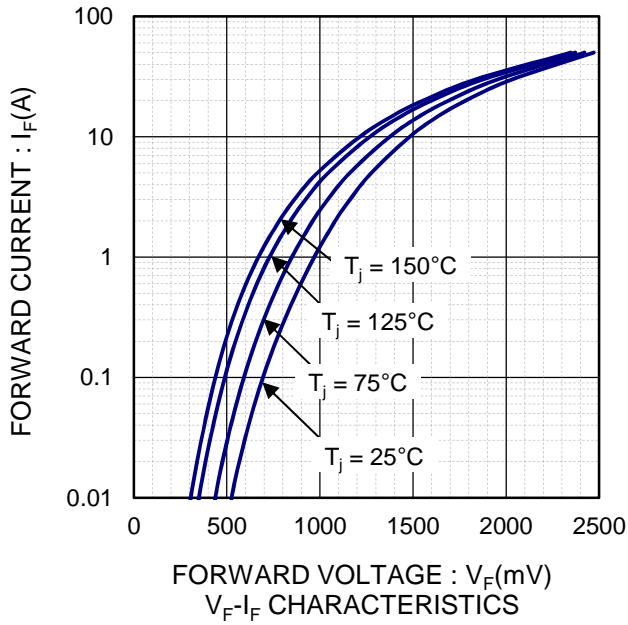
●Absolute Maximum Ratings ($T_c = 25^\circ\text{C}$)

Parameter	Symbol	Conditions	Limits	Unit
Repetitive peak reverse voltage	V_{RM}	Duty ≤ 0.5	600	V
Reverse voltage	V_R	Direct voltage	600	V
Average rectified forward current	I_o	60Hz half sin wave , Resistive load $T_c=90^\circ\text{C}$	5	A
Forward current surge peak	I_{FSM}	60Hz half sin wave ,Non-repetitive at $T_j=25^\circ\text{C}$	50	A
Operating junction temperature	T_j	-	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-	-55 to +150	$^\circ\text{C}$

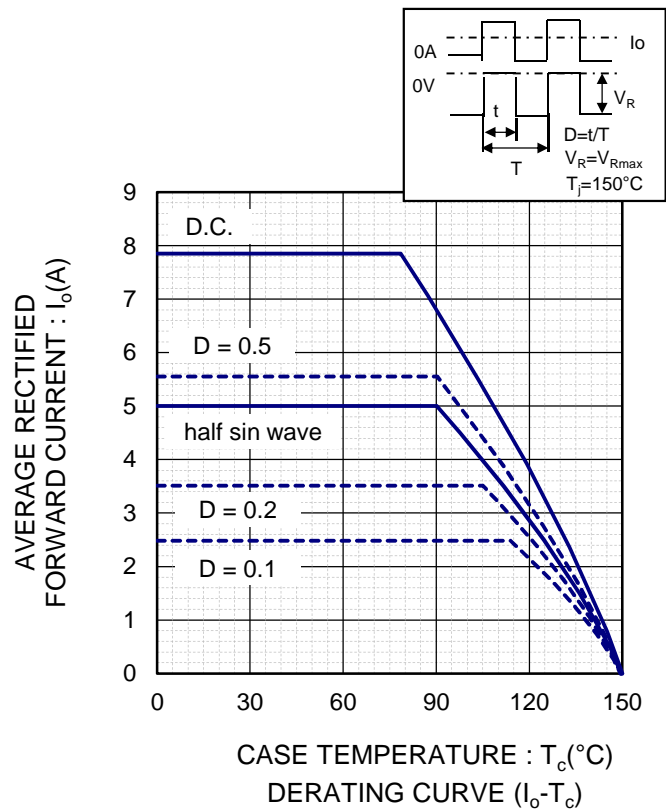
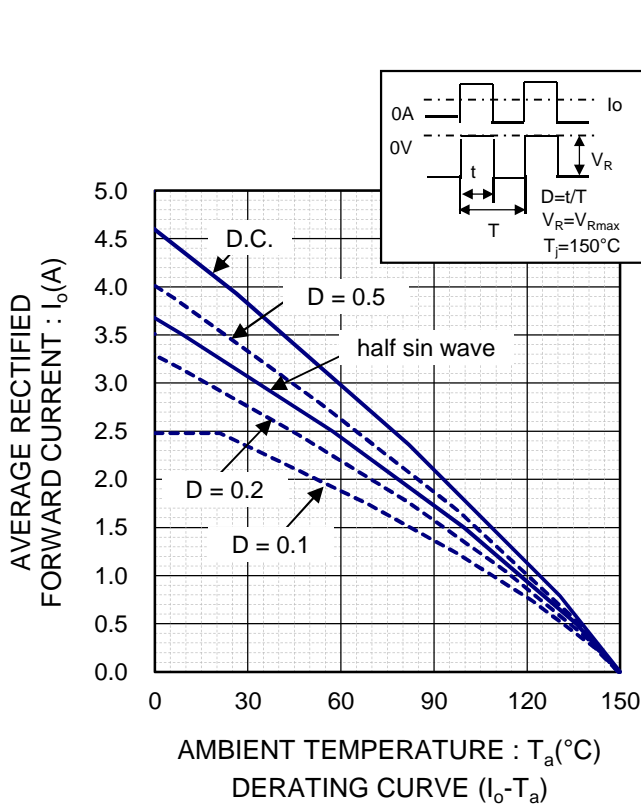
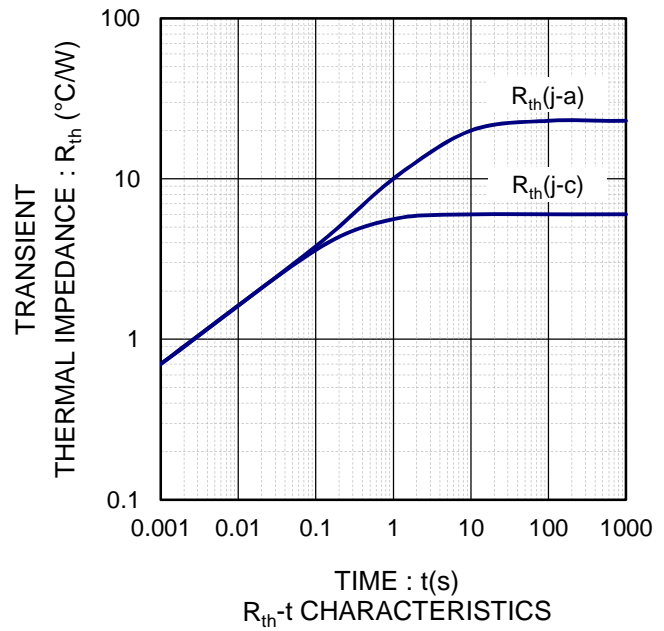
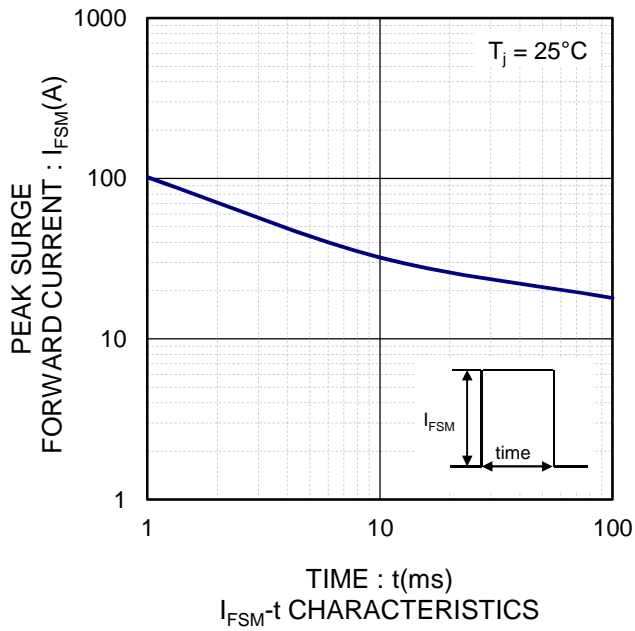
●Electrical Characteristics ($T_j = 25^\circ\text{C}$)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	V_F	$I_F=5\text{A}$	-	1.3	1.7	V
Reverse current	I_R	$V_R=600\text{V}$	-	0.05	10	μA
Reverse recovery time	t_{rr}	$I_F=0.5\text{A}, I_R=1\text{A}, I_{rr}=0.25 \times I_R$	-	22	30	ns
Thermal resistance	$R_{th(j-c)}$	Junction to case	-	-	6.0	$^\circ\text{C} / \text{W}$

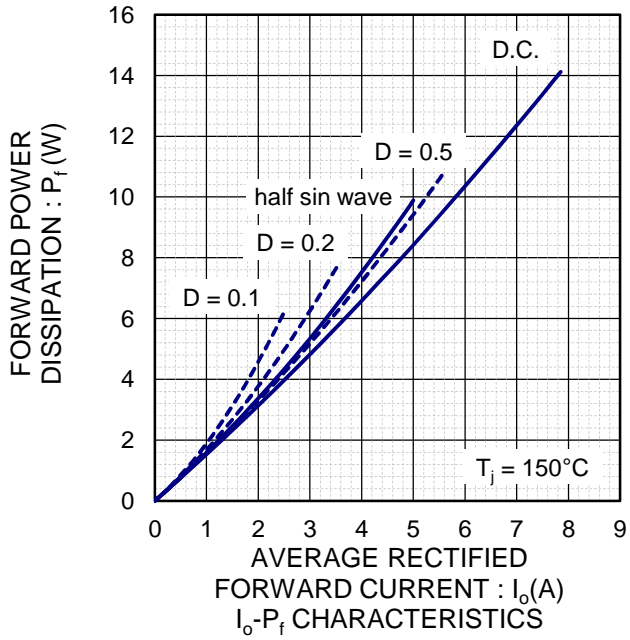
●Electrical Characteristic Curves



●Electrical Characteristic Curves



●Electrical Characteristic Curves



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