

D10FY10SY

Schottky Barrier Diodes

100V, 10A

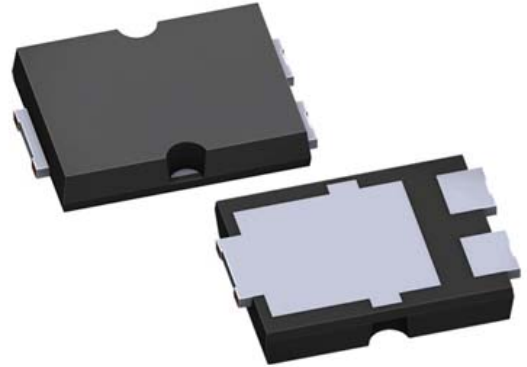
Feature

- Permit high current with a small package
- Based on AEC-Q101
- Halogen free
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): FY

Package (JEDEC Code): TO-277A similar



Equivalent circuit



Absolute Maximum Ratings (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	T _{stg}		-55 to 175	°C
Junction temperature	T _j		-55 to 150	°C
Repetitive peak reverse voltage	V _{RRM}		100	V
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, With heatsink, T _l =118°C *	10	A
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, On alumina substrate, T _a =25°C *	2.6	A
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, On glass-epoxy substrate, T _a =25°C *	1.9	A
Surge forward current	I _{FSM}	50Hz sine wave, Non-repetitive, 1 cycle, Peak value, T _j =25°C	260	A

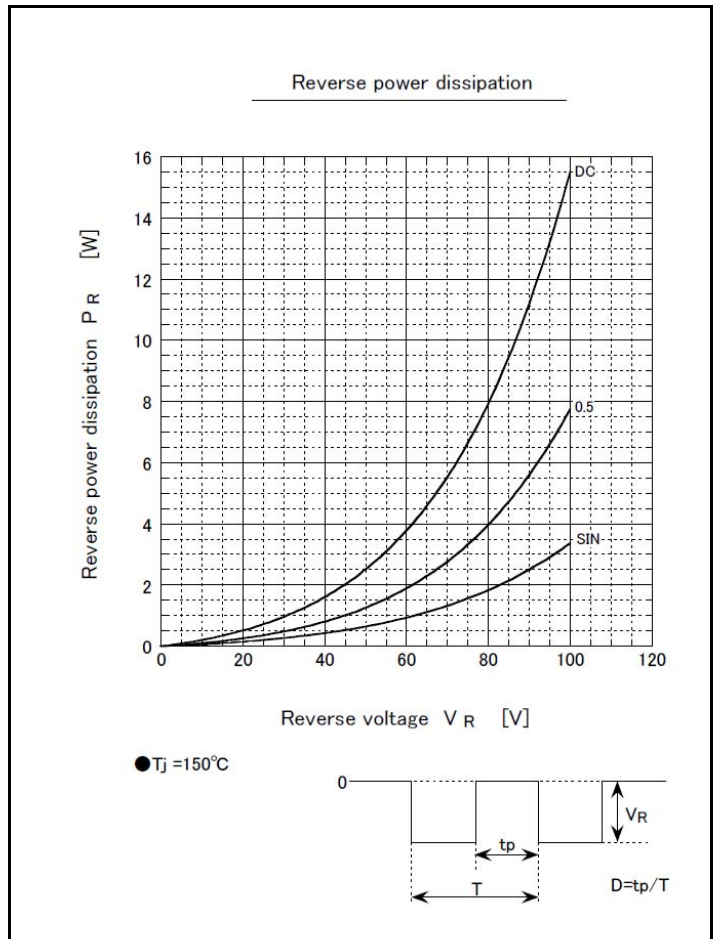
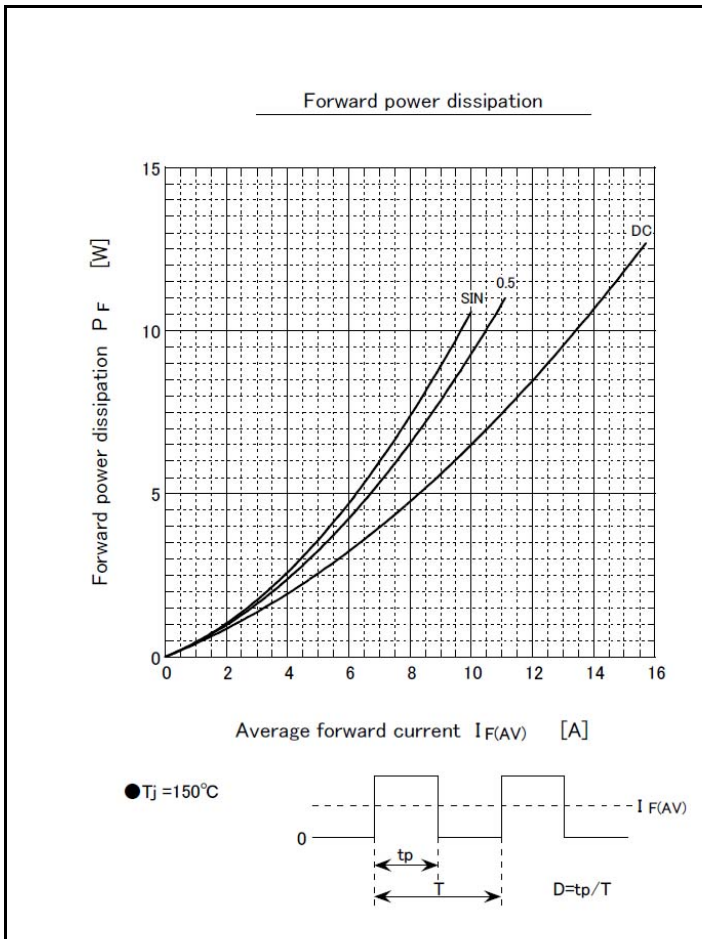
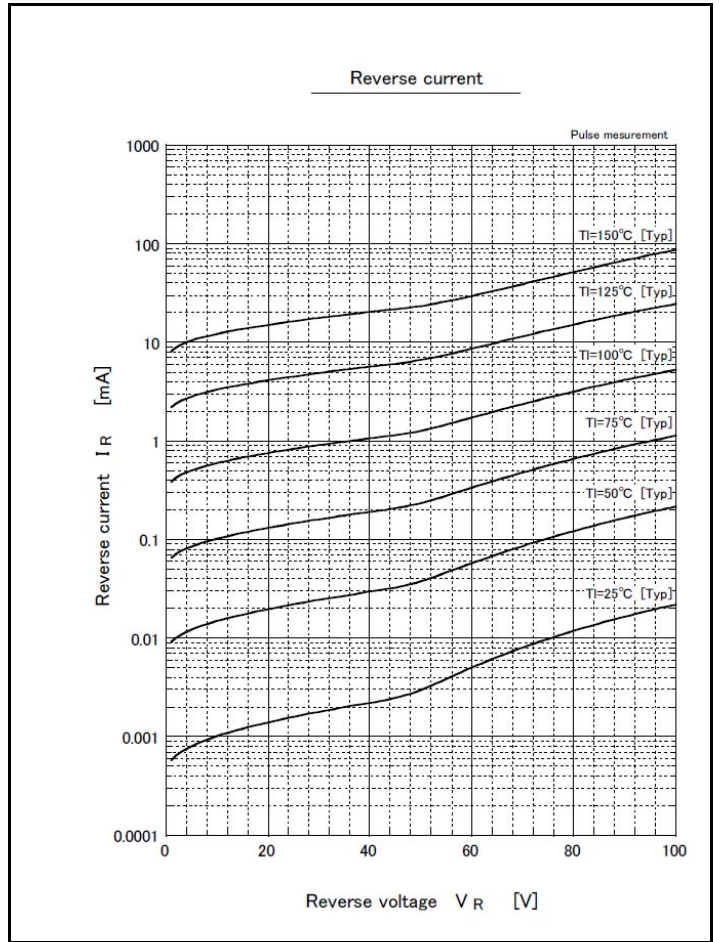
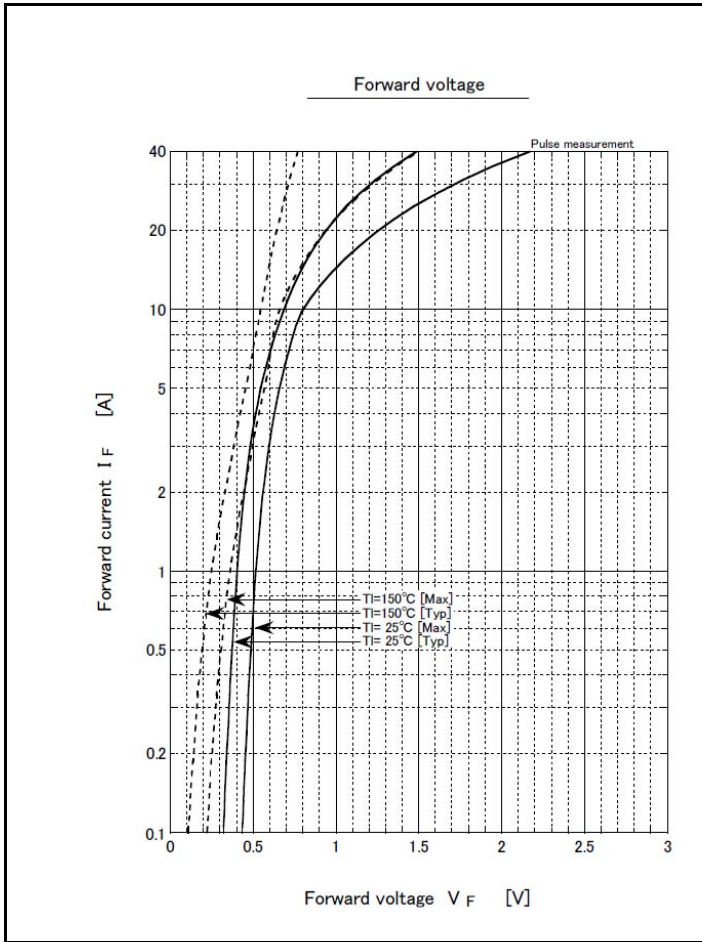
* : See the original Specifications

Electrical Characteristics (unless otherwise specified : Tl=25°C)

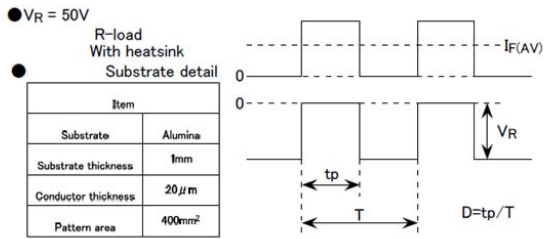
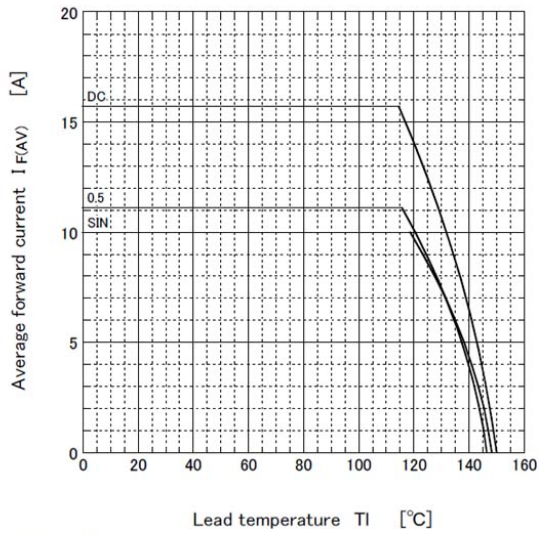
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=10A, Pulse measurement			0.8	V
Reverse current	I_R	VR=100V, Pulse measurement			0.4	mA
Total capacitance	C_t	f=1MHz, VR=10V		253		pF
Thermal resistance	Rth(j-l)	Junction to lead, With heatsink *			2.8	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, On alumina substrate *			60	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, On glass-epoxy substrate *			65	°C/W

* :See the original Specifications

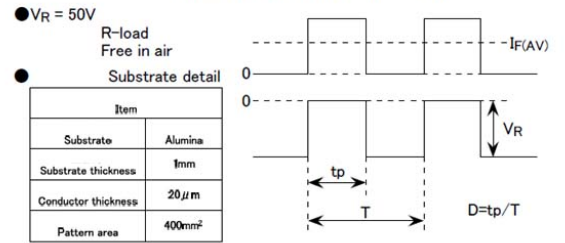
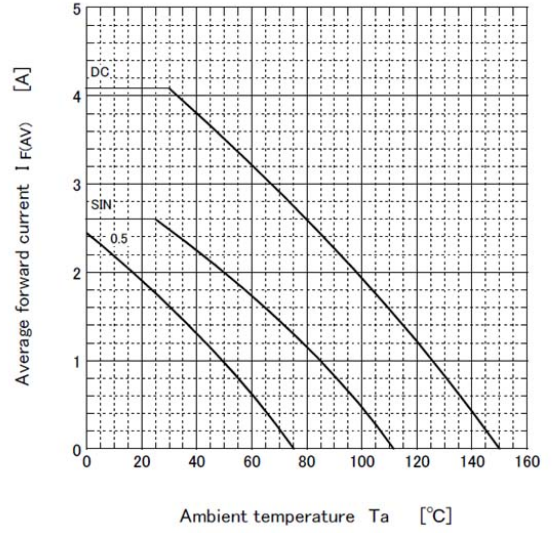
CHARACTERISTIC DIAGRAMS



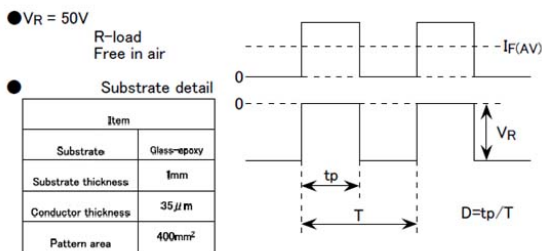
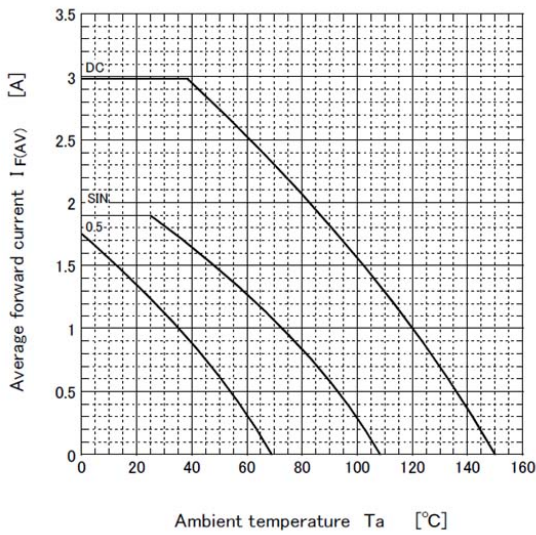
Derating curve



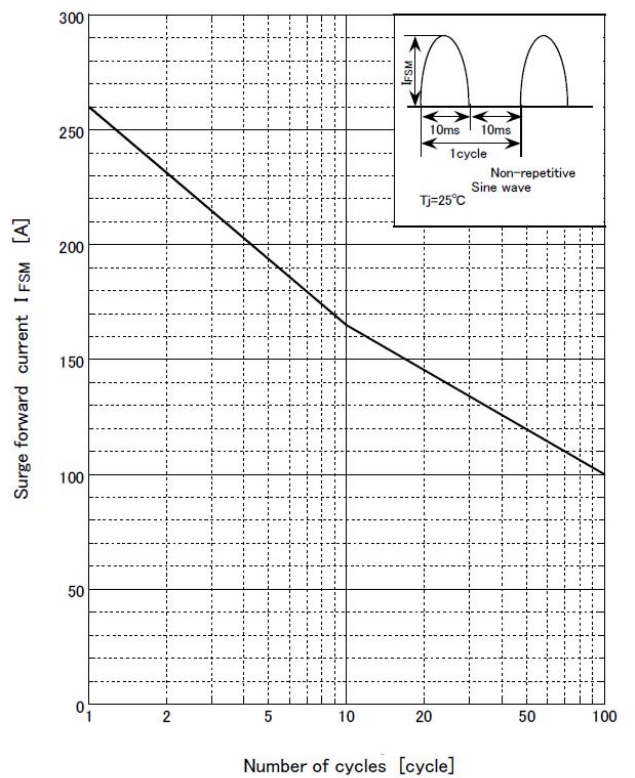
Derating curve

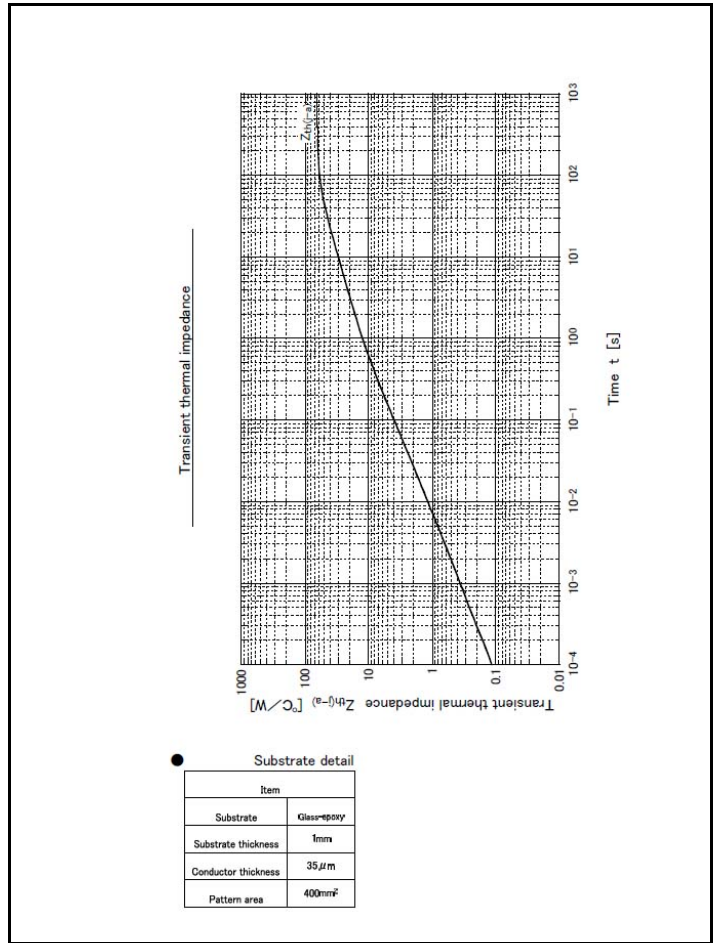
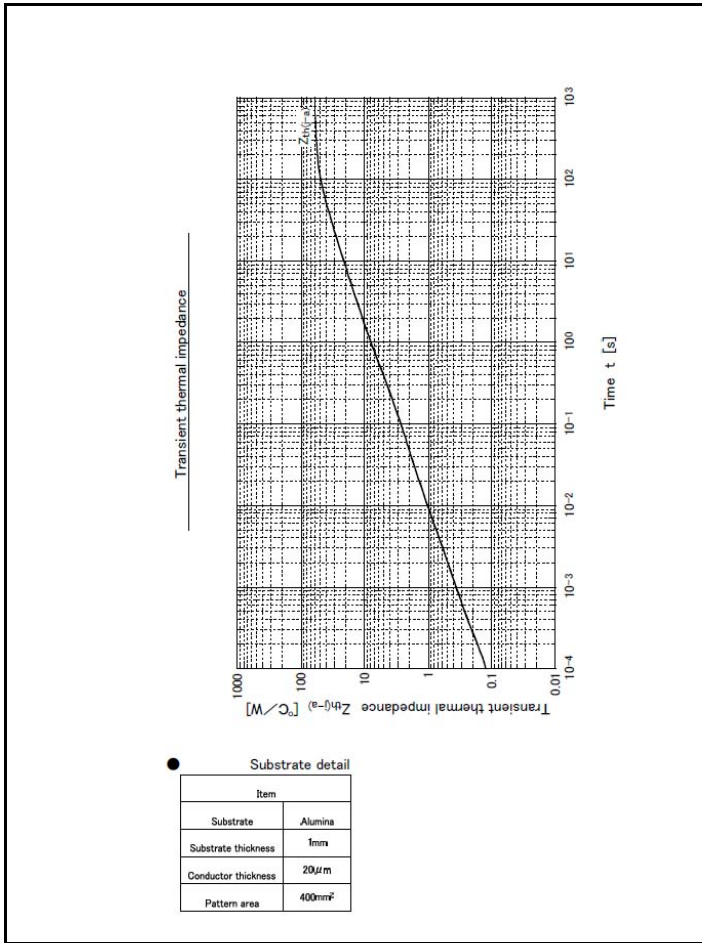
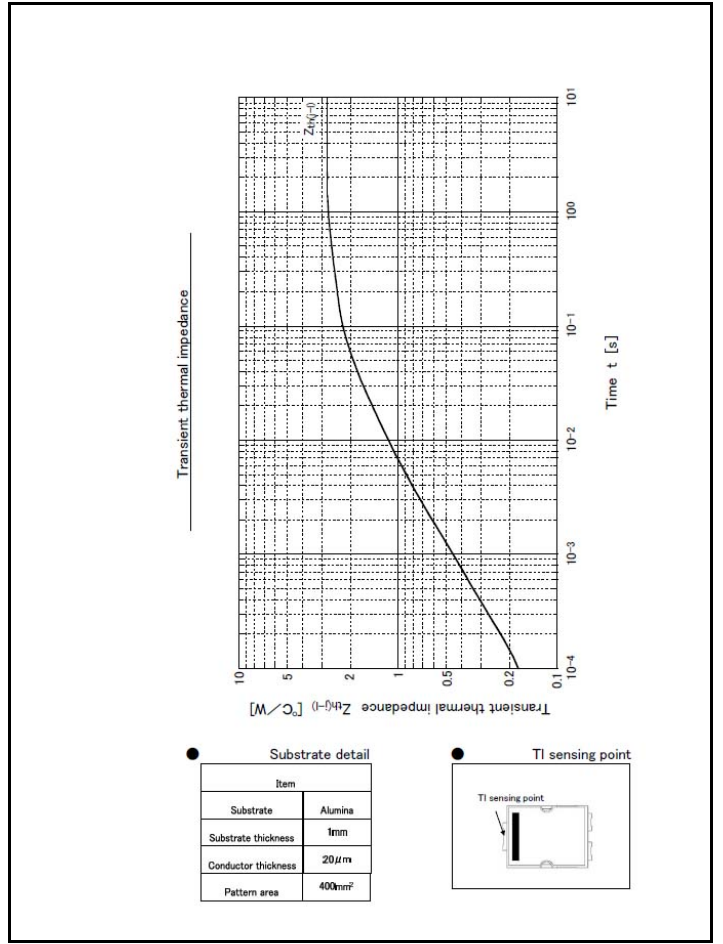
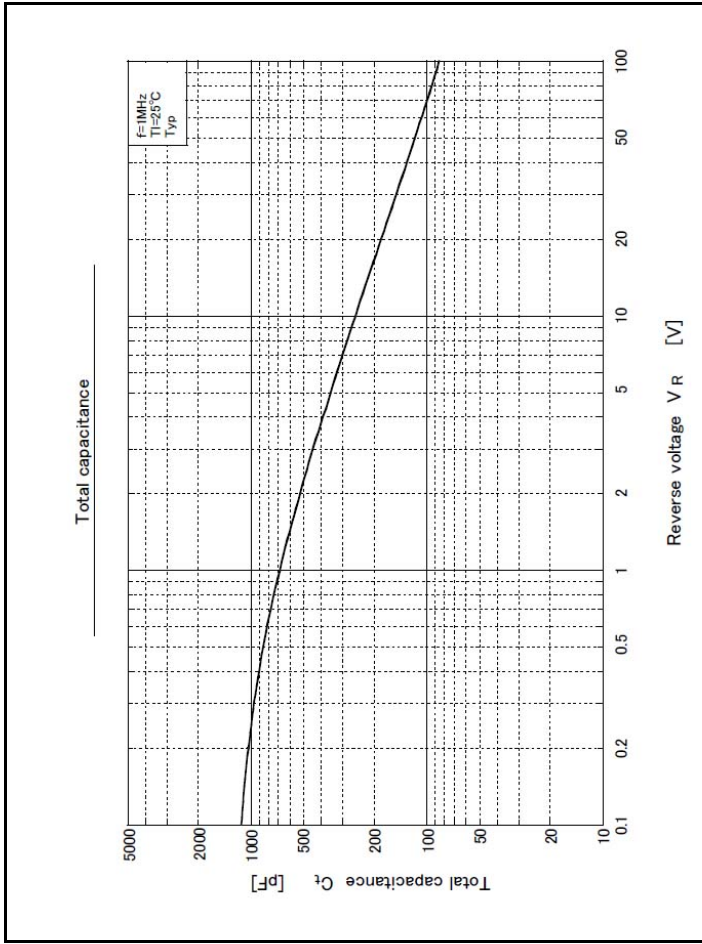


Derating curve



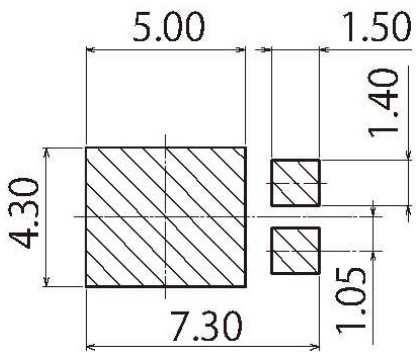
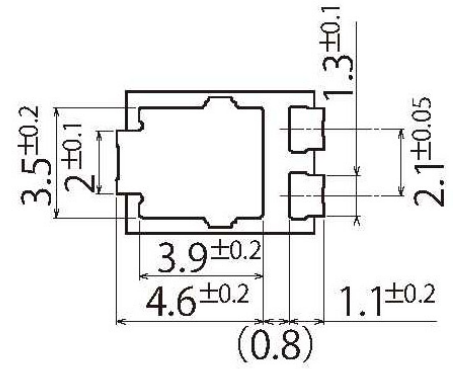
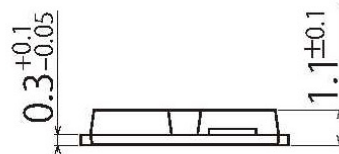
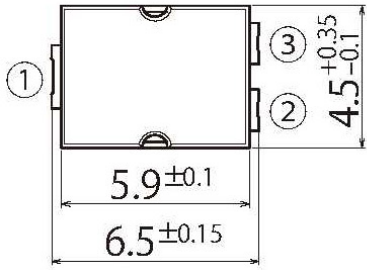
Surge forward current capability





G4

JEDEC Code	TO-277A similar
JEITA Code	-
House Name	FY



Referential Soldering Pad

Notes

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