

D5FY10SY

Schottky Barrier Diodes

100V, 5A

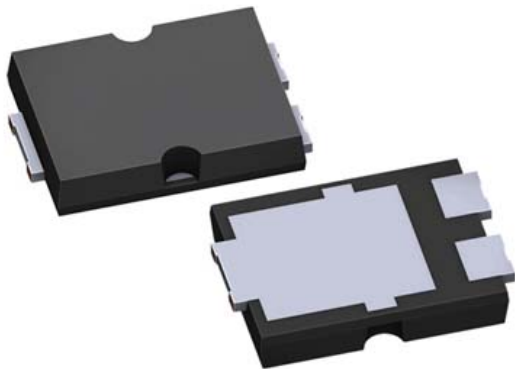
Feature

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

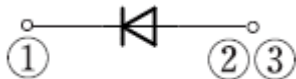
OUTLINE

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 temperrature	Tstg		-55 to 175	°C
Junction temperature	Tj		-55 to 150	°C
Repetitive peak reverse voltage	VRRM		100	V
Average forward current	IF(AV)	50Hz sine wave, Resistance load, With heatsink ,Tl=132°C ※	5	A
Average forward current	IF(AV)	50Hz sine wave, Resistance load, On alumina substrate, Ta=25°C ※	2.4	A
Average forward current	IF(AV)	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=25°C ※	2.2	A
Surge forward current	IFSM	50Hz sine wave, Non-repetitive, 1 cycle, Peak value, Tj=25°C	130	A

※ : See the original Specifications

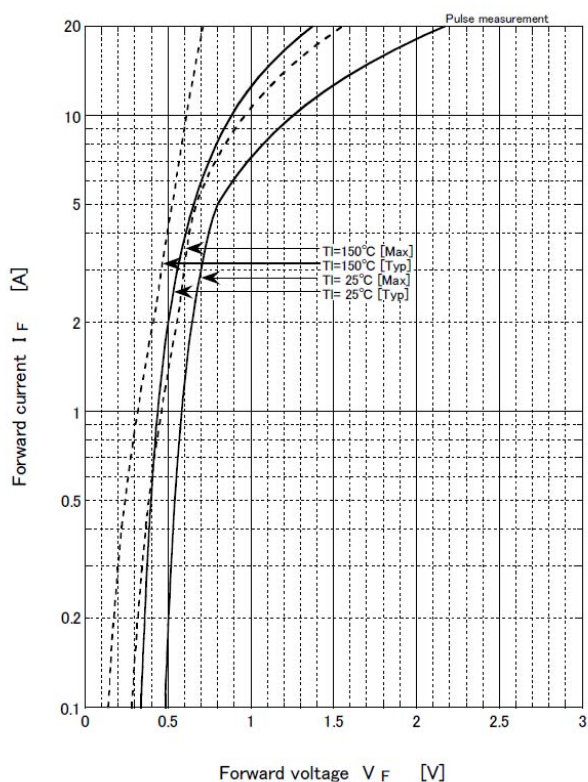
Electrical Characteristics (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	$I_F=5A$, Pulse measurement			0.8	V
Reverse current	I_R	$V_R=100V$, Pulse measurement			0.2	mA
Total capacitance	C_t	$f=1MHz$, $V_R=10V$		141		pF
Thermal resistance	$R_{th(j-l)}$	Junction to lead, With heatsink ※			3	°C/W
Thermal resistance	$R_{th(j-a)}$	Junction to ambient, On alumina substrate ※			60	°C/W
Thermal resistance	$R_{th(j-a)}$	Junction to ambient, On glass-epoxy substrate ※			65	°C/W

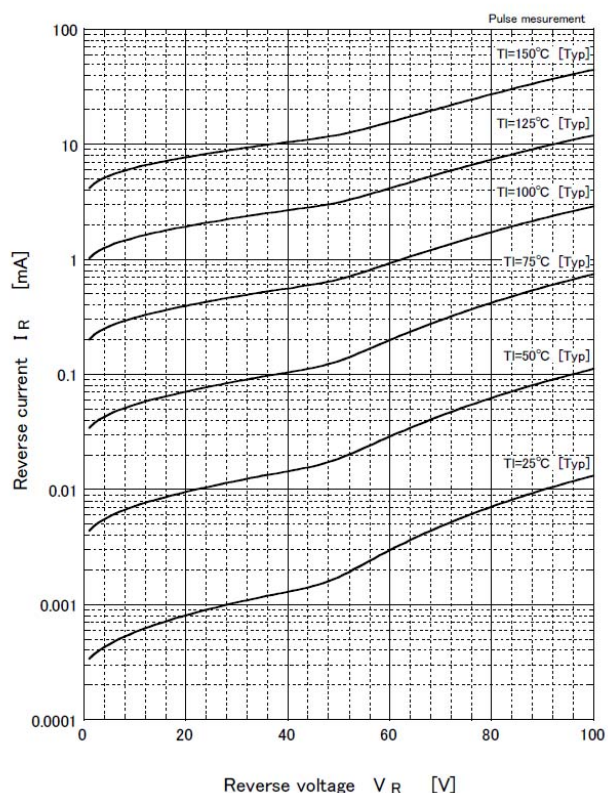
※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

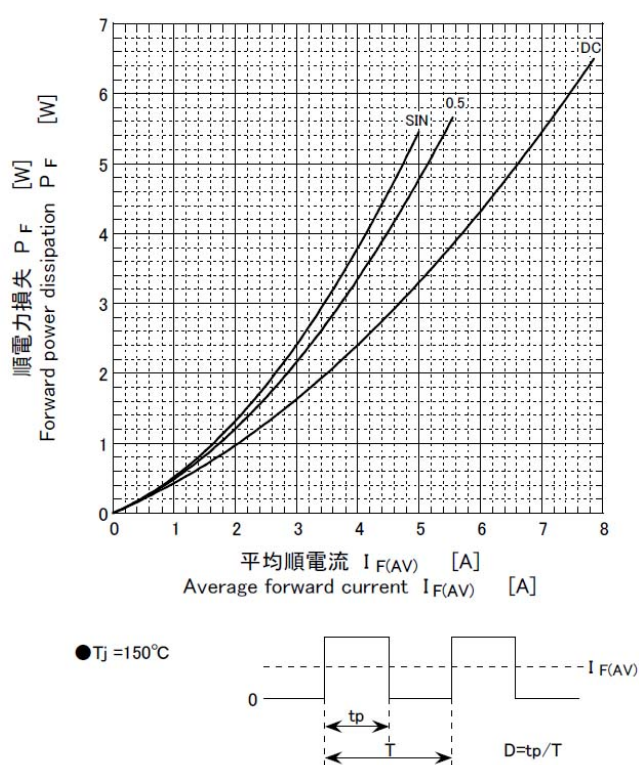
Forward voltage



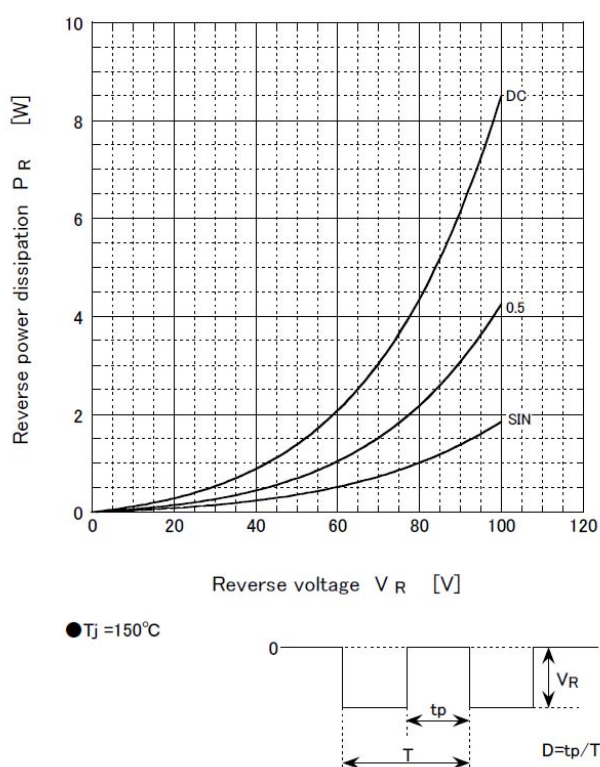
Reverse current



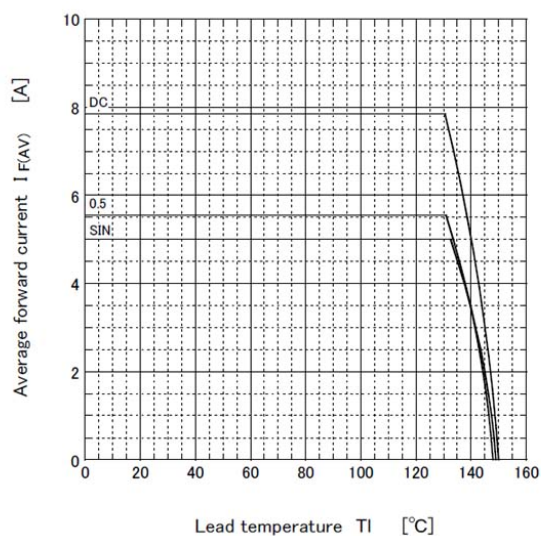
順電力損失曲線
Forward power dissipation



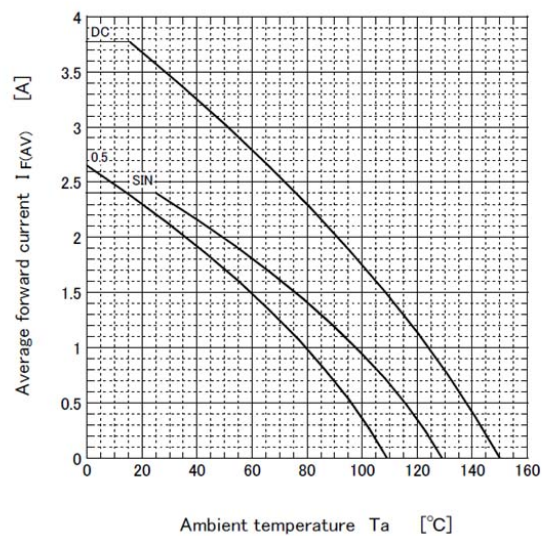
Reverse power dissipation



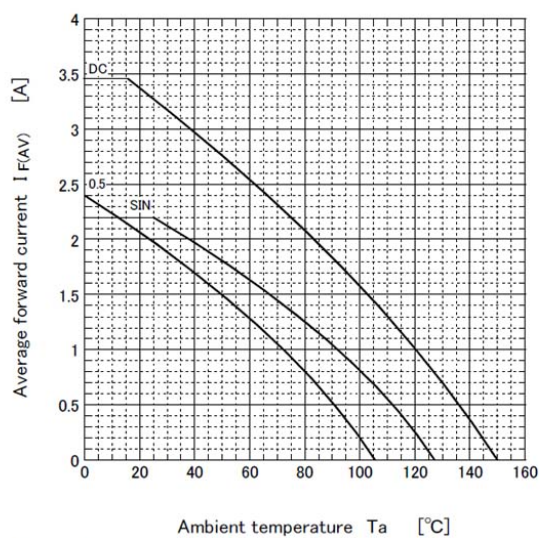
Derating curve



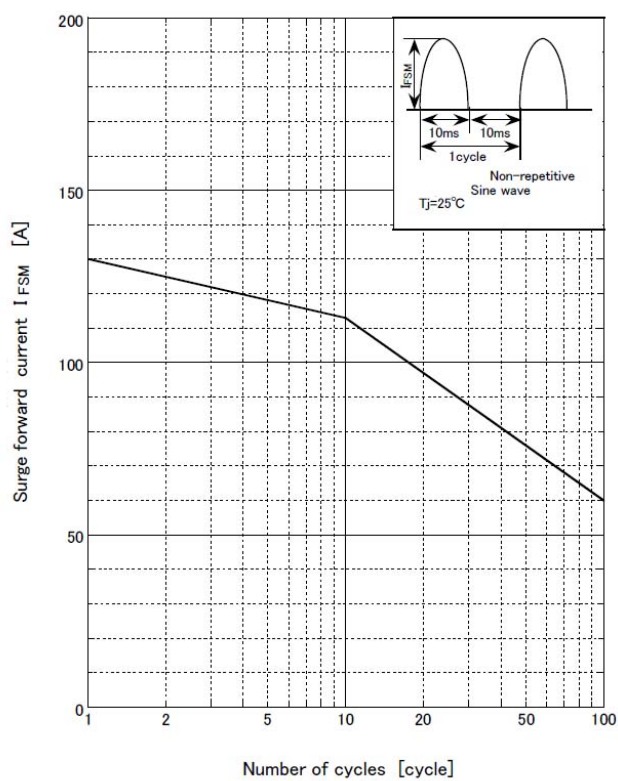
Derating curve

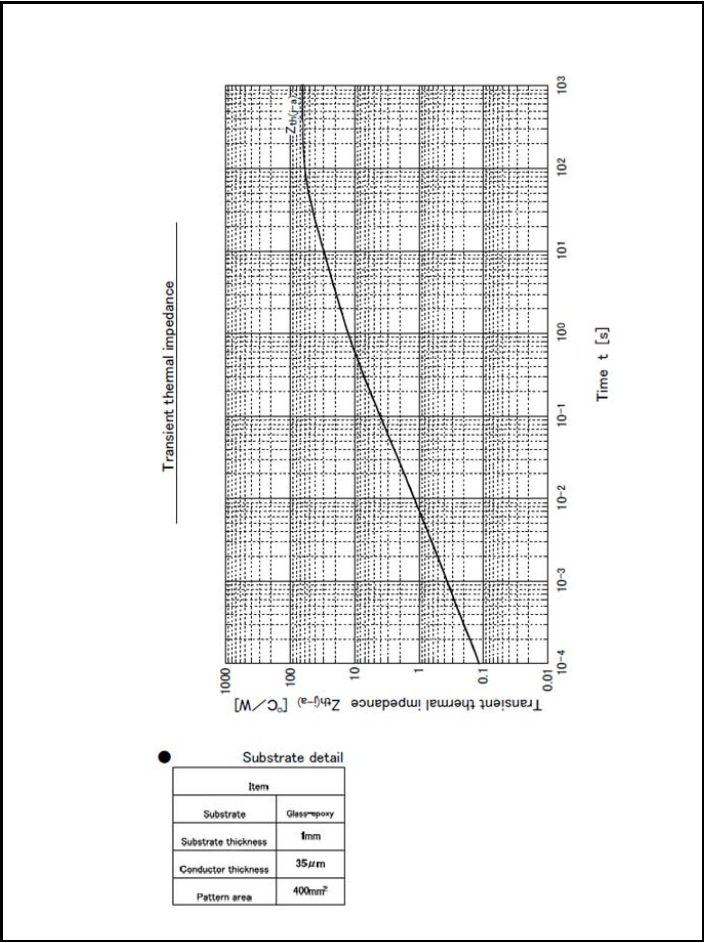
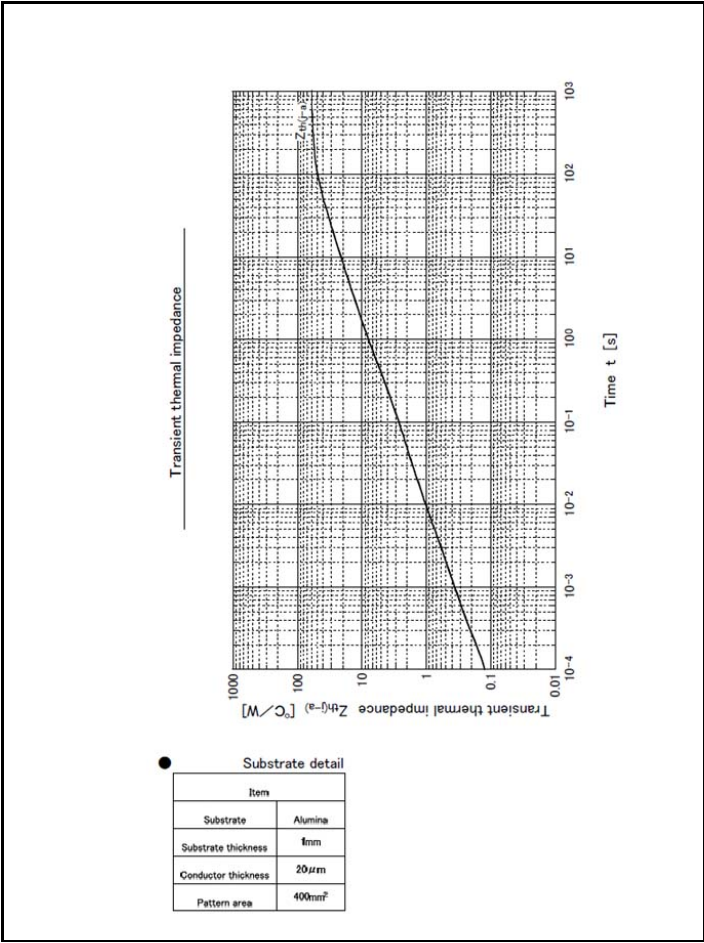
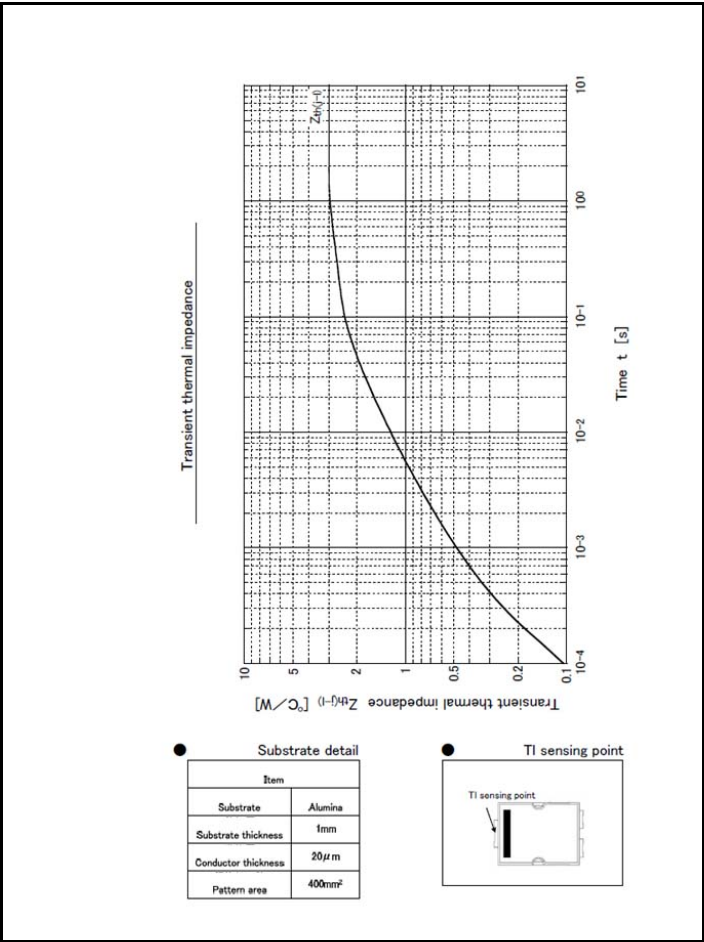
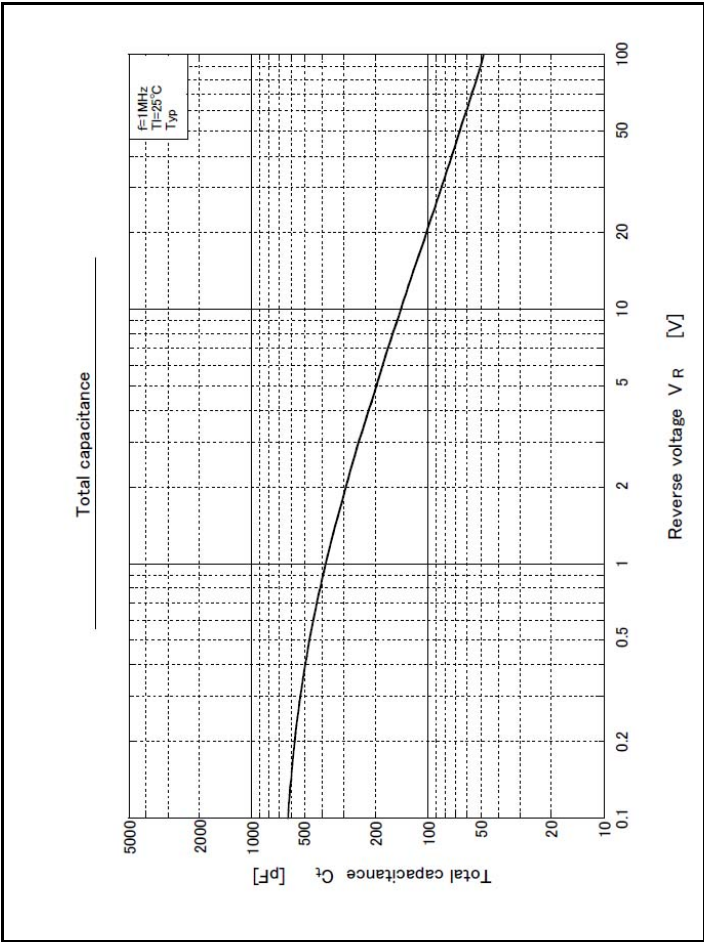


Derating curve



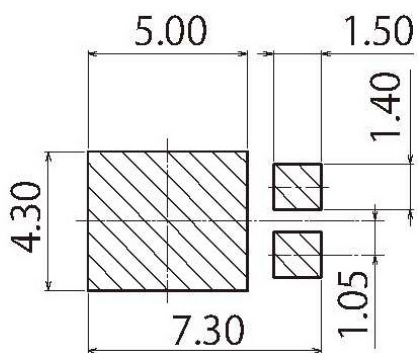
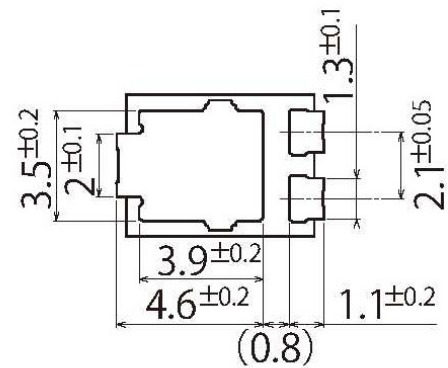
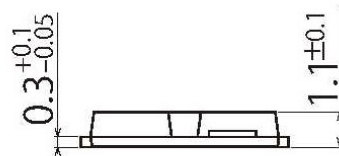
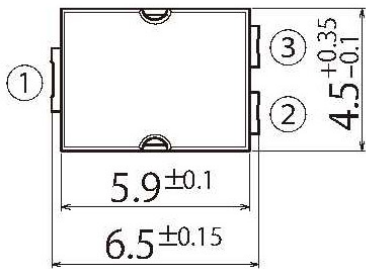
Surge forward current capability





G4

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



Referential Soldering Pad

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