

D15FR4ST

Schottky Barrier Diodes

40V, 15A

Feature

- Permit high current with a small package
- Tj=175°C
- Ultra low I_R
- Based on AEC-Q101
- Pb free terminal
- RoHS:Yes

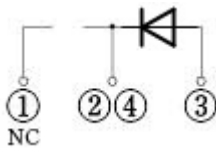
OUTLINE

Package (House Name): FR

Package (JEDEC Code): TO-252AA similar



Equivalent circuit



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-55 to 175	°C
Junction temperature	Tj		-55 to 175	°C
Repetitive peak reverse voltage	VRRM		40	V
Average forward current	IF(AV)	50Hz sine wave, Resistance load, With heatsink ,Tc=152°C	15	A
Surge forward current	IFSM	50Hz sine wave, Non-repetitive, 1cycle, Peak value, Tj=25°C	250	A
Surge forward current	IFSM1	tp=1ms, Sine wave, Non-repetitive, Peak value, Tj=25°C	570	A

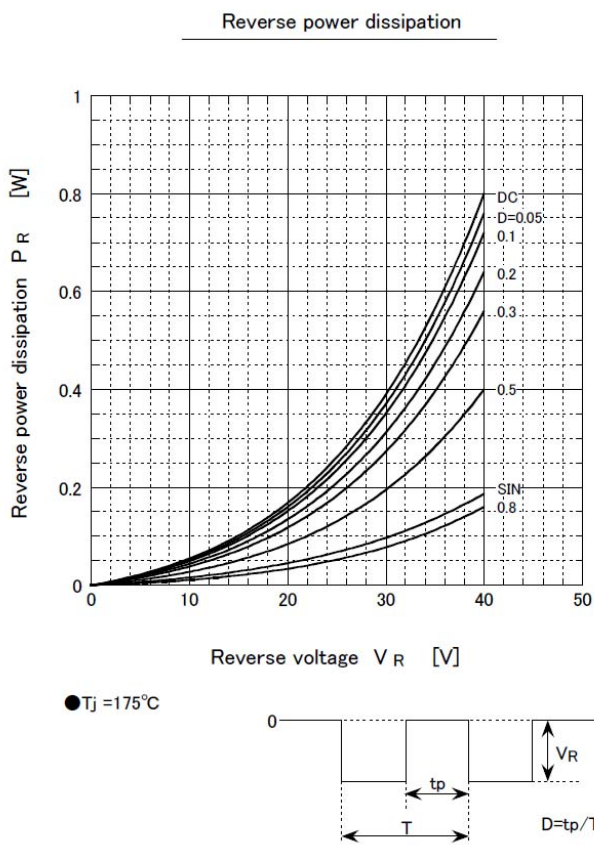
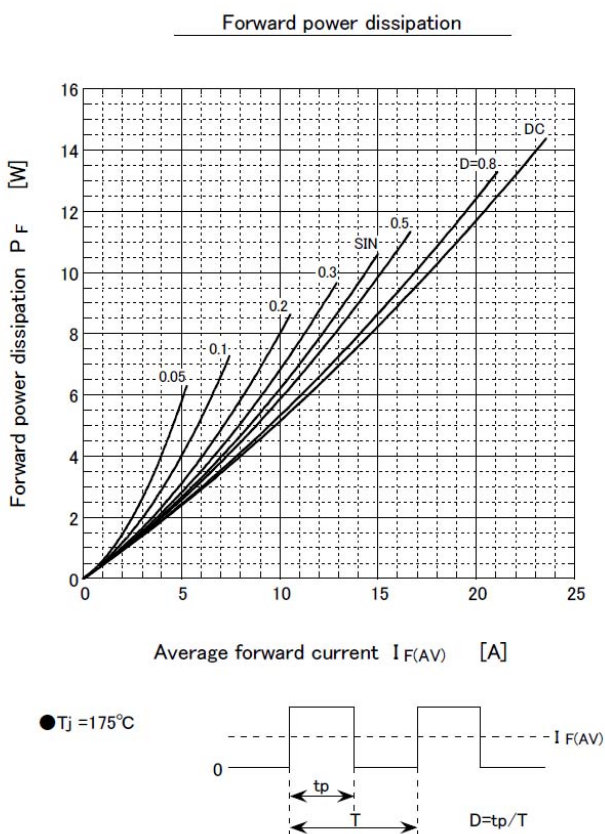
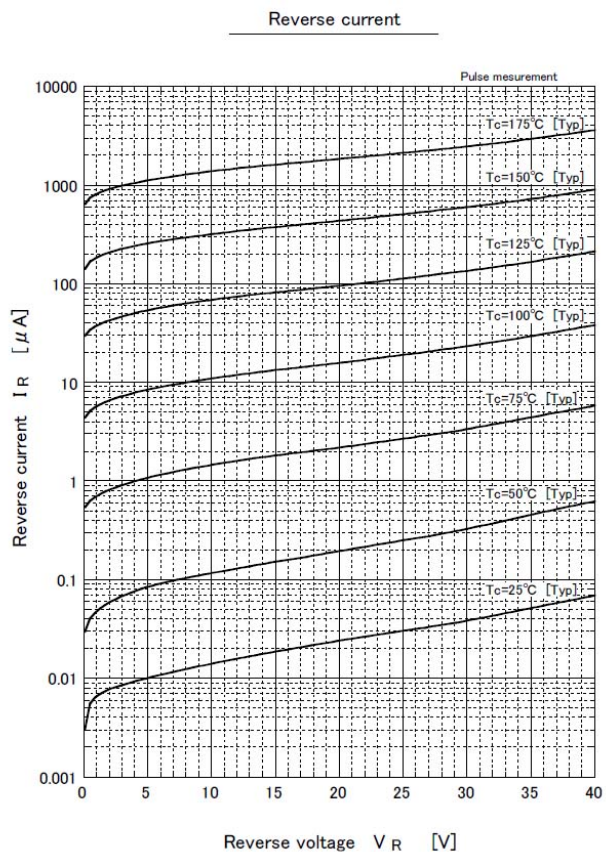
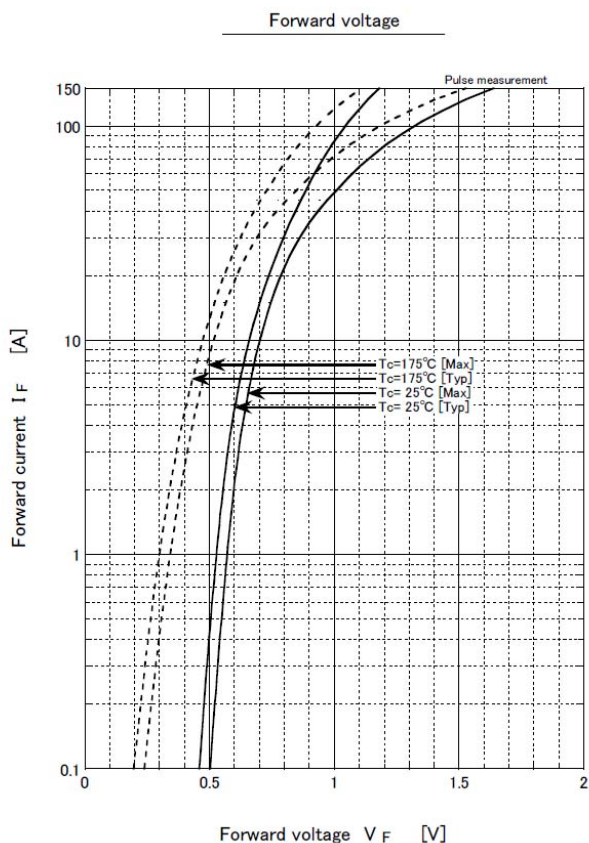
※ :See the original Specifications

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

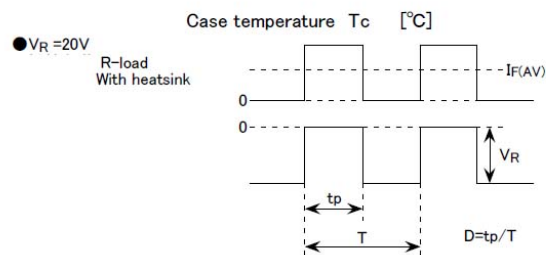
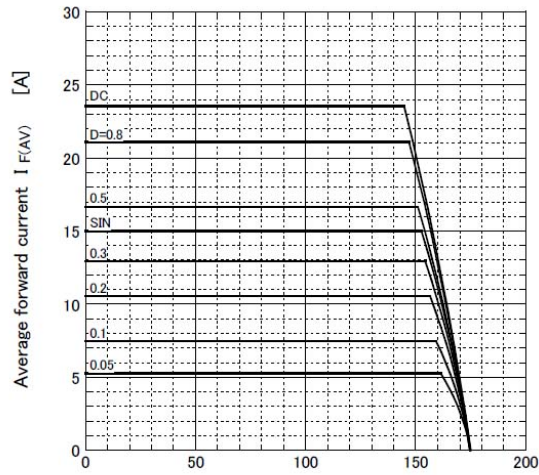
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	$I_F=15A$, Pulse measurement			0.74	V
Reverse current	I_R	$V_R=40V$, Pulse measurement			0.04	mA
Total capacitance	C_t	$f=1MHz$, $V_R=10V$		398		pF
Thermal resistance	$R_{th(j-c)}$	Junction to case			2.1	°C/W

※ : See the original Specifications

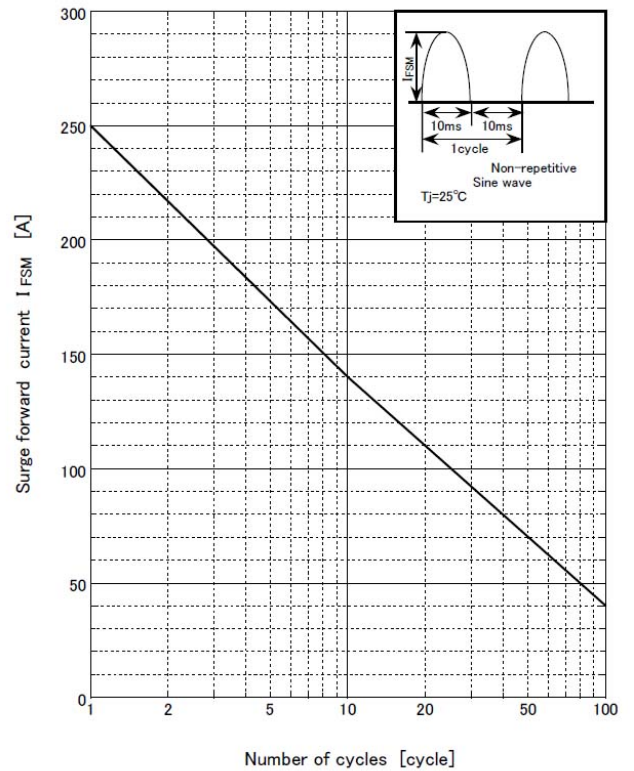
CHARACTERISTIC DIAGRAMS



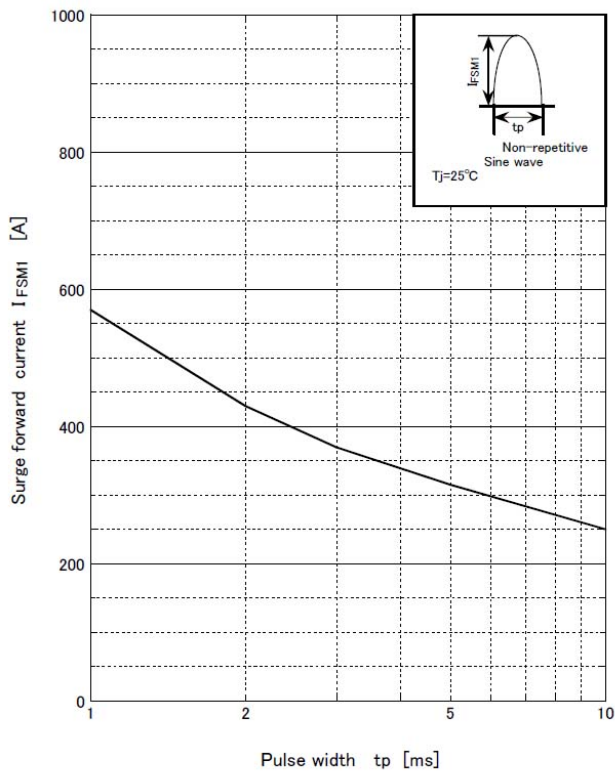
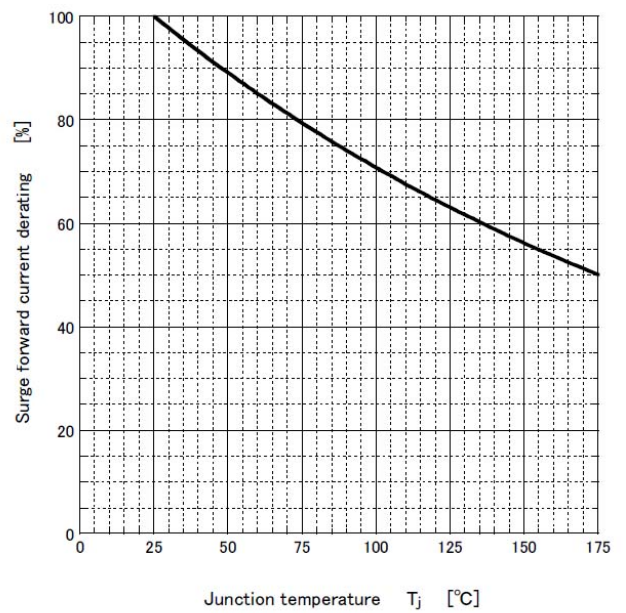
Derating curve

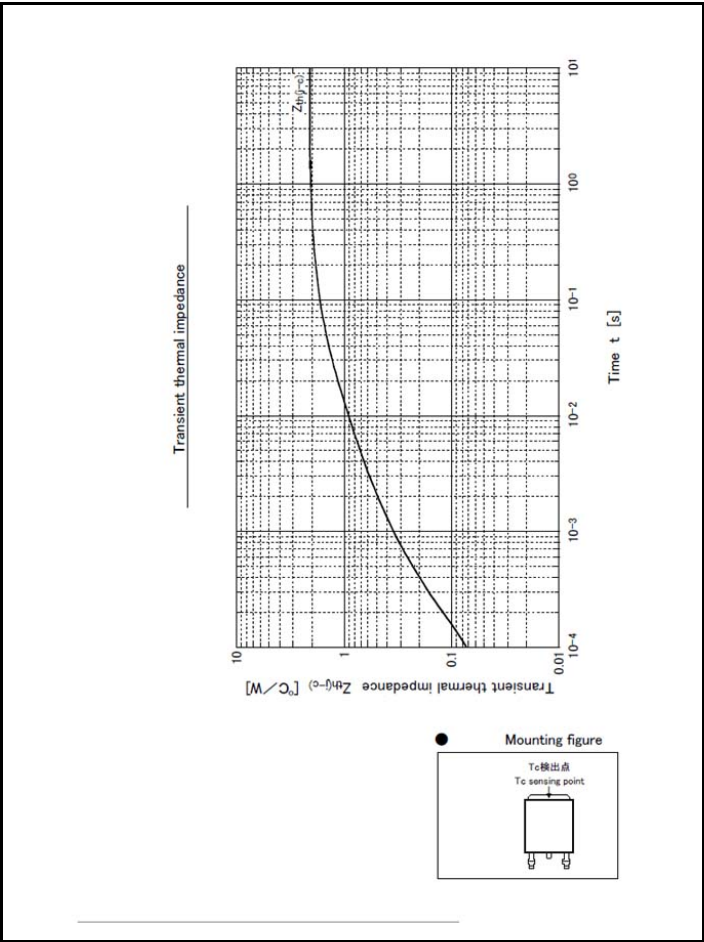
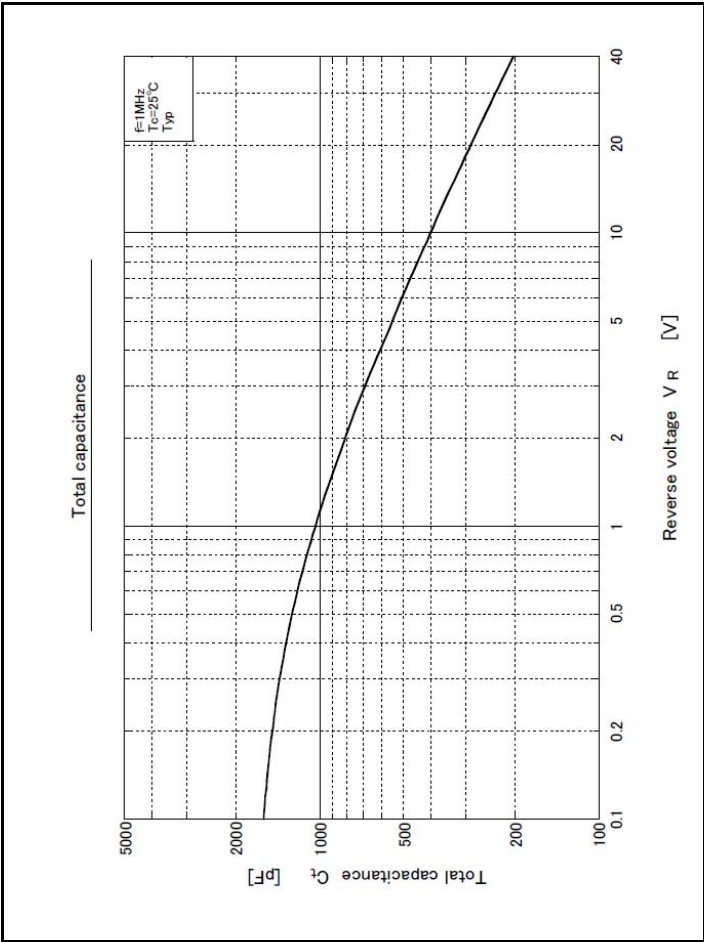


Surge forward current capability



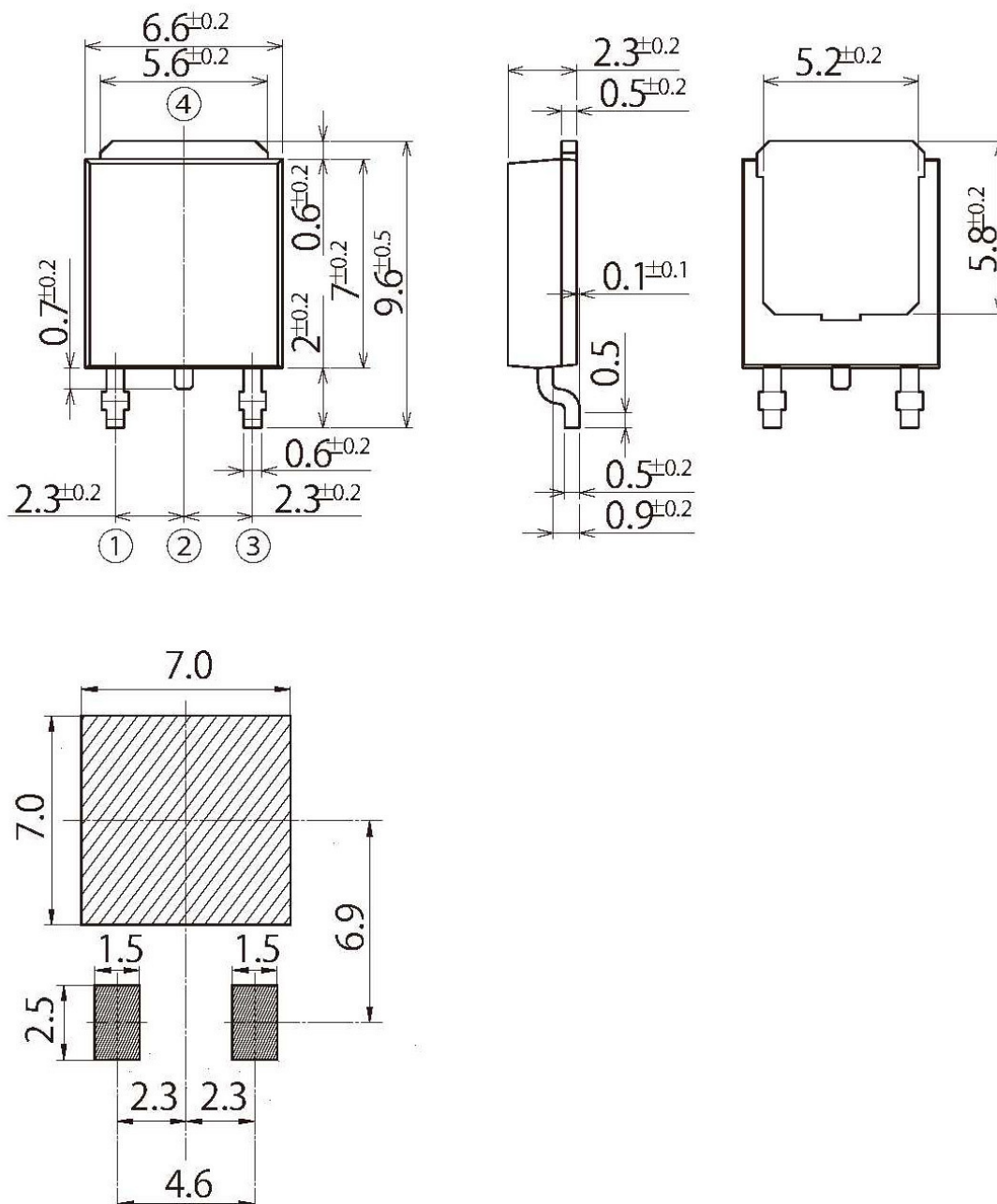
Surge forward current capability

Surge forward current derating
vs Junction temperature



G5

JEDEC Code	TO-252AA similar
JEITA Code	—
House Name	FR



Referential Soldering Pad

- Optimize soldering pad to the board design and soldering condition.

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