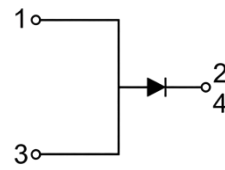


Superfast Recovery Rectifiers

Parameter	Value	Unit
V_{RRM}	600	V
$I_{F(AV)}$	20	A



TO-252

Features

- High current capability
- Low forward voltage drop
- Low power loss, high efficiency
- High surge capability

Applications

- Typical applications are in switching power supplies, converters, freewheeling diodes, and reverse battery protection.

Absolute Maximum Ratings (Ta=25°C, unless otherwise noted)

Parameter	Symbol	Value	Unit	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	600	V	
Maximum RMS Bridge Input Voltage	V_{RMS}	420	V	
Maximum DC Blocking Voltage	V_{DC}	600	V	
Maximum Average Forward Rectified Current	$I_{F(AV)}$	20	A	
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	150	A	
Maximum Forward Voltage at 20A DC	V_F	1.6	V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_A=25^\circ\text{C}$	1.0	μA
		$T_A=125^\circ\text{C}$	100	μA
Maximum Reverse Recovery Time (Note1)	T_{RR}	50	ns	
Typical Thermal Resistance	$R_{\theta JA}$	50	$^\circ\text{C}/\text{W}$	
Operating Temperature Range	T_J	-55 to +150	$^\circ\text{C}$	
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ\text{C}$	

Notes:

1. Measured with $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{rr}=0.25\text{A}$

Typical Characteristics

Fig.1 Forward Current Derating Curve

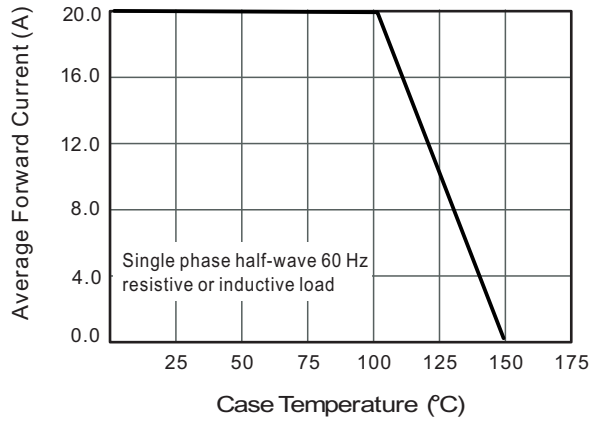


Fig.2 Typical Reverse Characteristics

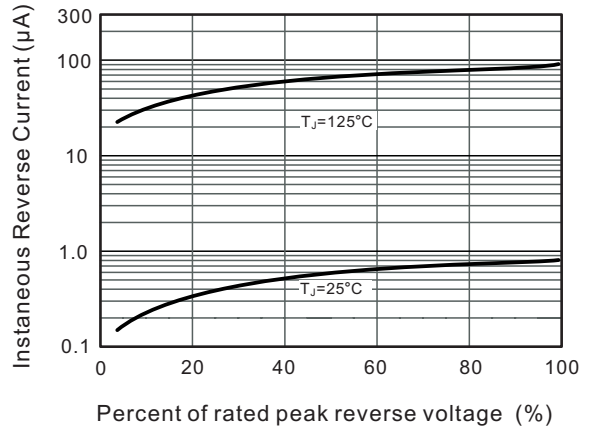


Fig.3 Typical Forward Characteristics

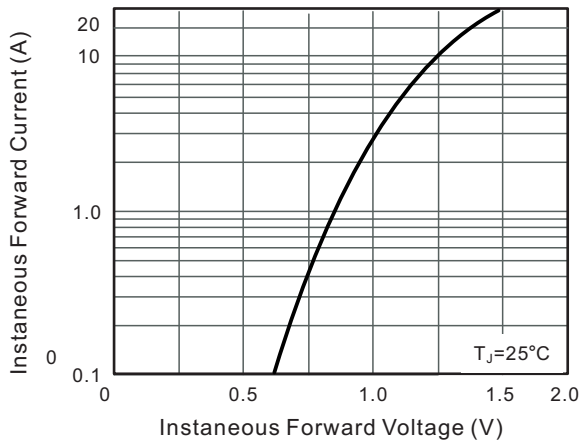
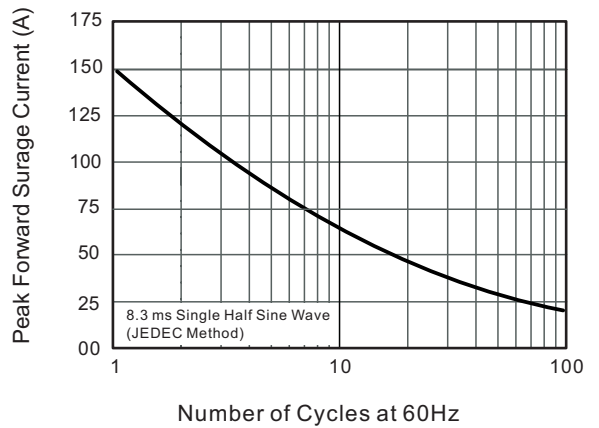
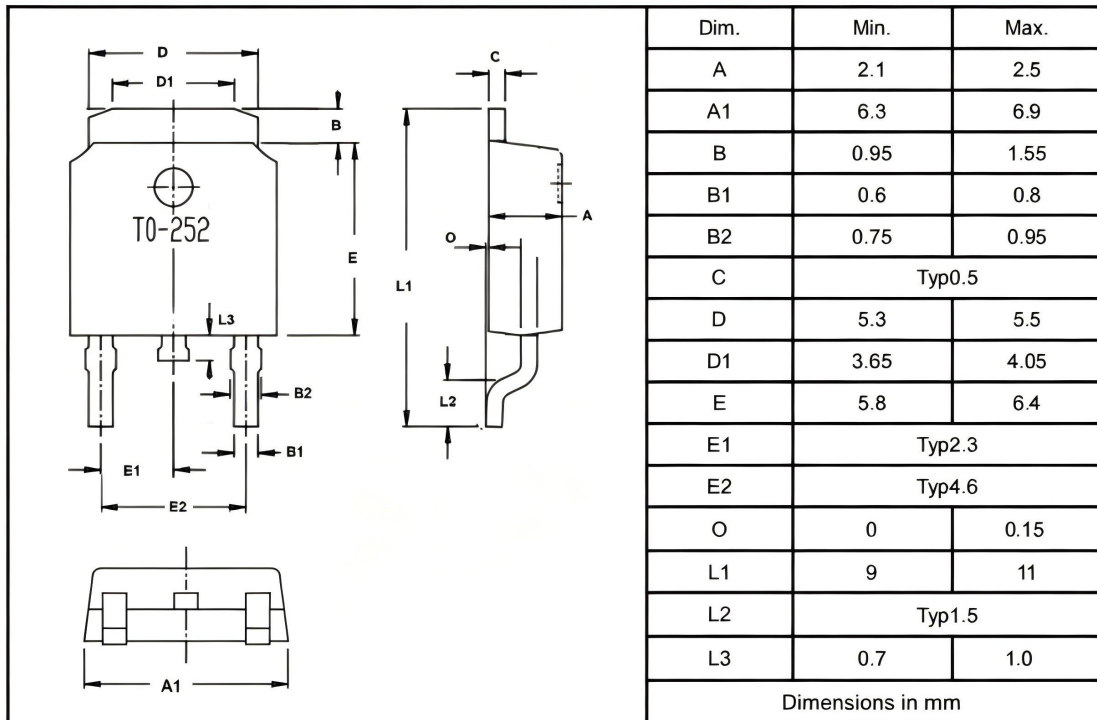


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current



Package Outlines

TO-252



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