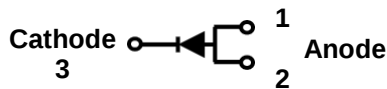


Trench MOS Barrier Schottky Rectifier

TO-277



Features

- Advanced trench technology
- Low forward voltage drop
- Low power losses
- High efficiency operation
- Lead Free Finish, RoHS Compliant

Applications

- DC/DC Converters
- AC/DC Adaptors

Maximum ratings and electrical characteristics (T_J = 25°C unless otherwise noted)

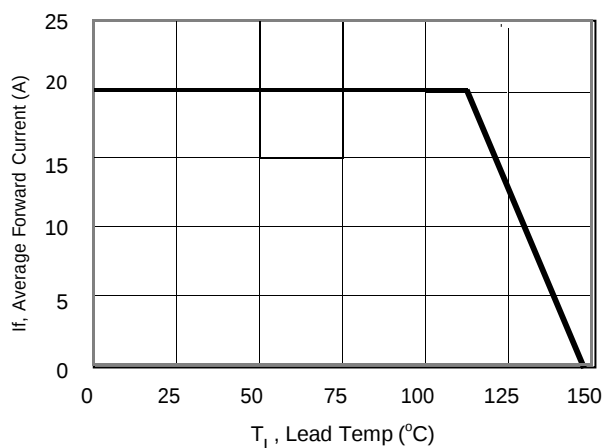
Parameter			Symbol	Limit		Unit
Maximum repetitive peak reverse voltage			V _{RRM}	80		V
Maximum average forward rectified current			I _{F(AV)}	20		A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load per diode			I _{FSM}	320		A
Operating junction and storage temperature range			T _J , T _{STG}	-50 to +150		°C
Typical thermal resistance per diode (Mounted on FR-4 PCB)			R _{θJA}	72		°C/W
Instantaneous forward voltage			V _{F(1)}	TYP.	MAX.	V
	I _F =10A	T _J =25°C		0.54	-	
	I _F =20A			0.62	0.72	
	I _F =10A	T _J =125°C		0.49	-	
	I _F =20A			0.57	-	
Instantaneous reverse current per diode at rated reverse voltage		T _J =25°C	I _{R(2)}	30	150	uA
		T _J =125°C		20	-	mA

Notes:

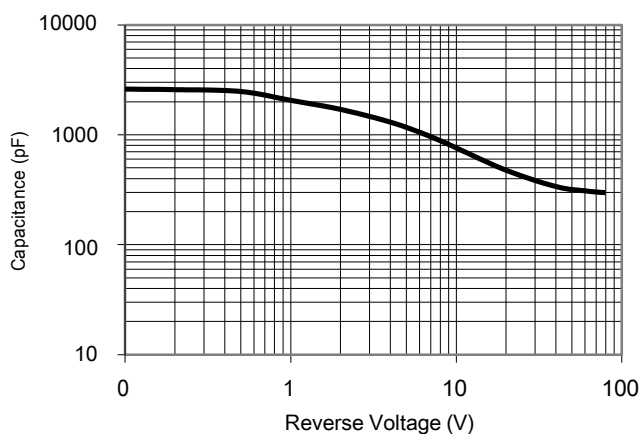
(1) Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

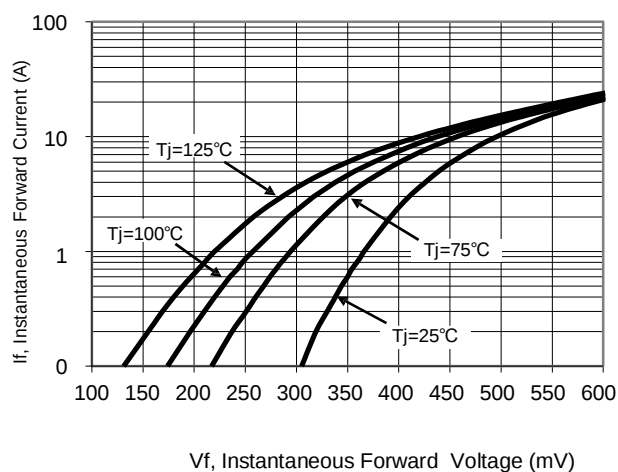
RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



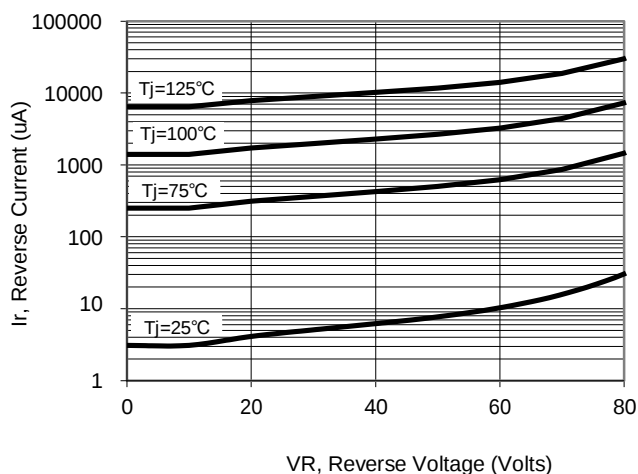
Current Derating, Case



Typical Junction Capacitance



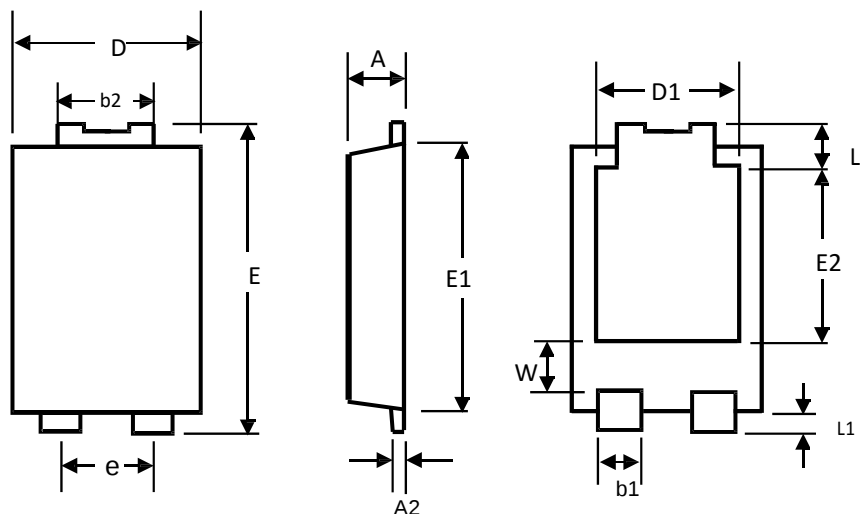
Typical Forward Voltage



Typical Reverse Current

PACKAGE OUTLINE

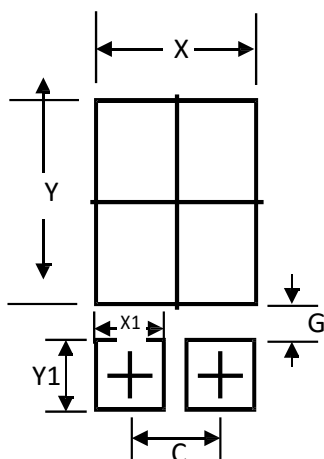
TO-277



Dim	Min	Max
A	1.1	1.3
A2	0.3	0.4
b1	0.8	1
b2	1.7	1.9
D	3.9	4.1
D1	3.054	
E	6.4	6.6
e	1.84	
E1	5.3	5.5
E2	3.549	
L	0.8	1
L1	0.5	0.7
W	1.1	1.4

unit:mm

Mounting Pad Layout



Dim	Min
C	1.8
G	0.9
X	3.4
X1	1.4
Y	4.9
Y1	1.4

unit:mm