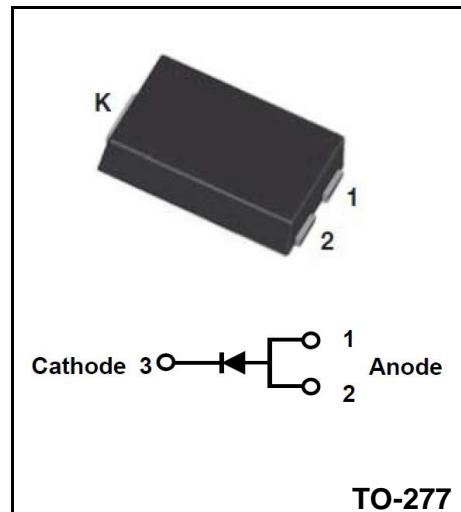


Trench MOS Barrier Schottky Rectifier Low VF Low IR
Reverse Voltage - 45 V
Forward Current - 10 A
FEATURES

- ♦ Advanced trench technology
- ♦ Low forward voltage drop
- ♦ Low power losses
- ♦ High efficiency operation
- ♦ Lead free in comply with EU RoHS 2011/65/EU directives


MECHANICAL DATA

- ♦ Case: TO-277
- ♦ Terminals: Solderable per MIL-STD-750, Method 2026


Maximum Ratings (Per Leg) at Ta=25°C unless otherwise specified

Parameter	Symbols	Value	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	45	V
Maximum RMS voltage	V_{RMS}	45	V
Maximum DC Blocking Voltage	V_{DC}	45	V
Maximum Average Forward Rectified Current Per diode	$I_{F(AV)}$	10	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave superimposed on rated load per diode	I_{FSM}	240	A
Operating Temperature Range	T_J	-55 ~ +150	°C
Storage Temperature Range	T_{STG}	-55 ~ +150	°C
Typical Thermal Resistance Per diode(munted on FR-4 PCB)	$R_{θJC}$	72	°C/W

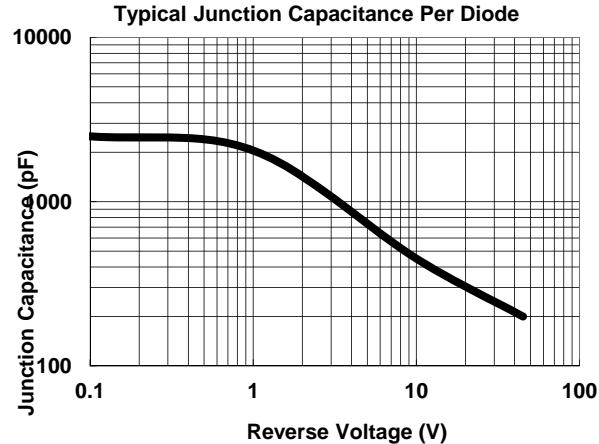
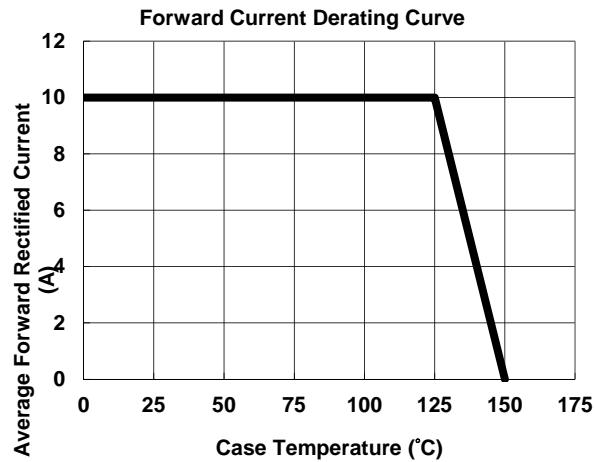
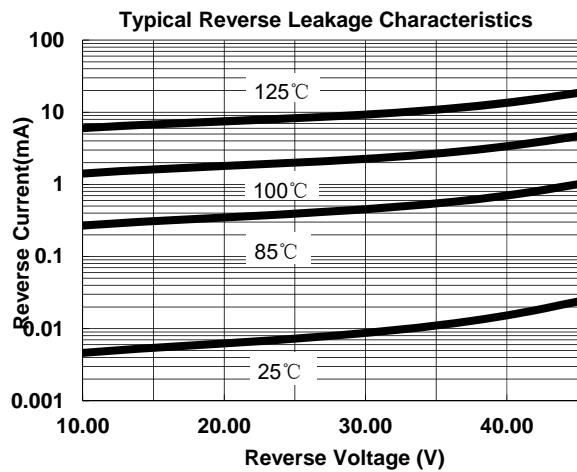
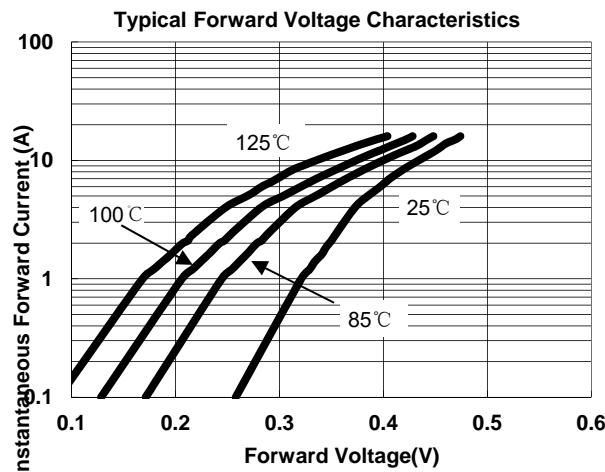
Note1: Thermal resistance from Junction to case per leg mounted on heatsink.

Electrical Characteristics (Per Leg) unless otherwise specified

Characteristics	Symbols	Value		Units
Forward Voltage Drop(Note2)	V_F	Typ	Max	V
at $I_F=2A$ Instantaneous forward voltage per diode		0.34	-	
		0.22	-	
at $I_F=10A$ Instantaneous forward voltage per diode		0.43	0.47	
		0.34	-	
Instantaneous reverse current per diode at rated reverse voltage	I_R	25	100	uA
		-	50	mA

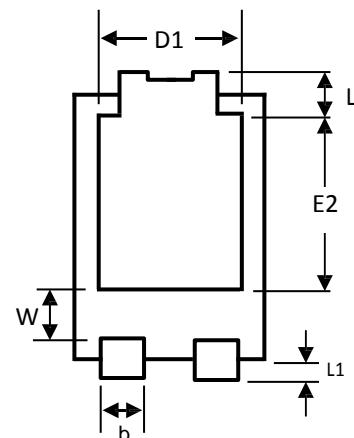
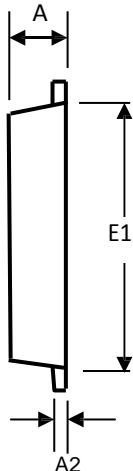
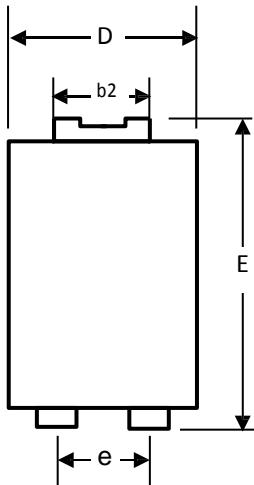
Note2: (1)Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

RATINGS AND CHARACTERISTIC CURVES


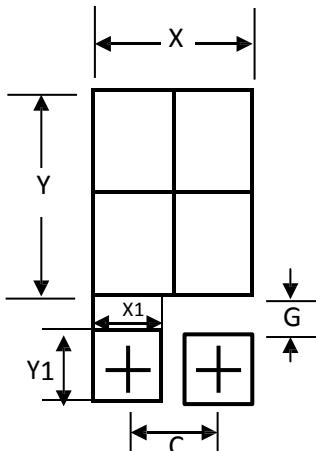
Package Outline
TO-277

Plastic surface mounted package; 3leads



Dim	Min	Max
A	1.1	1.2
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

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
TO-277	Tape/Reel,13"reel	5000	EIA-481-1