

TO-277 Plastic-Encapsulate Diodes

Schottky Rectifier

Features

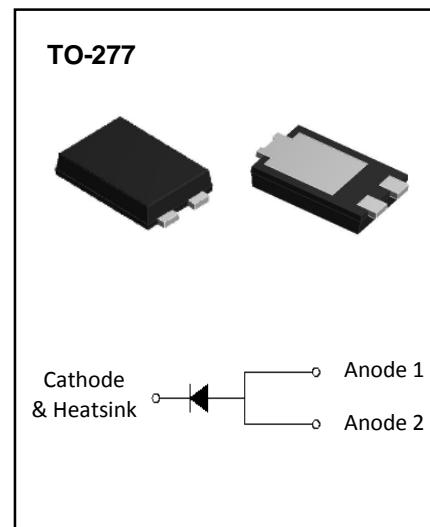
- I_o 20A
- V_{RRM} 200V
- High surge current capability
- High junction temperature
- Low leakage current

Applications

- Rectifier

Marking

- SR20H200L



MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{RRM}	Peak repetitive reverse voltage	200	V
V_{RWM}	Working peak reverse voltage		
V_R	DC blocking voltage		
$V_{R(RMS)}$	RMS reverse voltage	140	V
I_o	Average rectified output current	20	A
I_{FSM}	Non-Repetitive peak forward surge current (8.3ms half sine wave)	300	A
$R_{\theta JL}$	Thermal resistance from junction to lead	4.5	°C/W
$R_{\theta JA}$	Thermal resistance from junction to ambient	100	°C/W
T_j	Junction temperature	175	°C
T_{stg}	Storage temperature	-55~+175	°C

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions		Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=0.1\text{mA}$		200			V
Reverse current	I_R	$V_R=200\text{V}$	$T_j = 25^\circ\text{C}$			10	uA
			$T_j = 125^\circ\text{C}$			2	mA
Forward voltage	V_F	$I_F=20\text{A}$	$T_j = 25^\circ\text{C}$		0.86	0.90	V
			$T_j = 125^\circ\text{C}$		0.77		V
Junction Capacitance	C_j	$f=1\text{MHz}, VR=4\text{V}$			302		pF

Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on FR4 PCB double sided copper mini pad

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

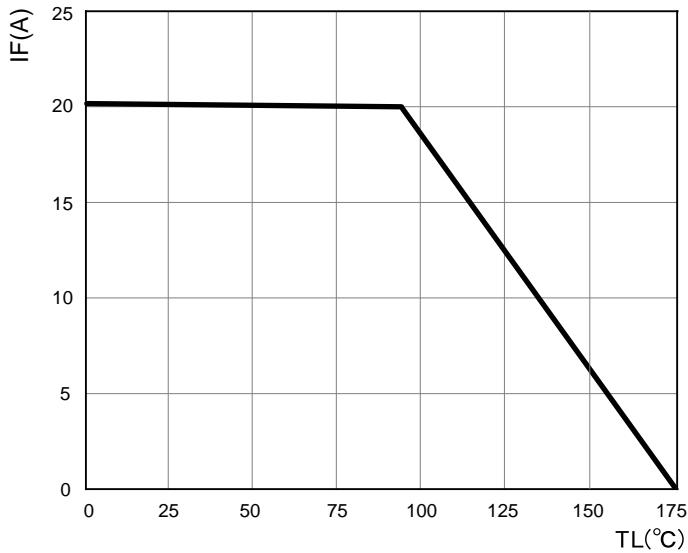


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

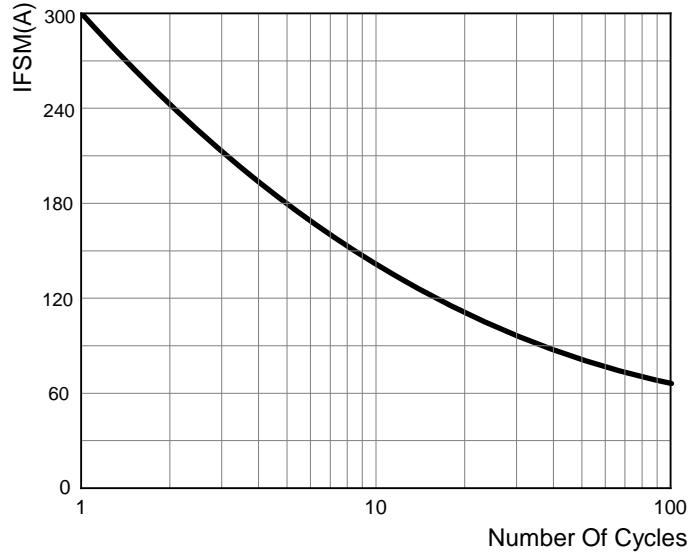


FIG.3: TYPICAL FORWARD CHARACTERISTICS

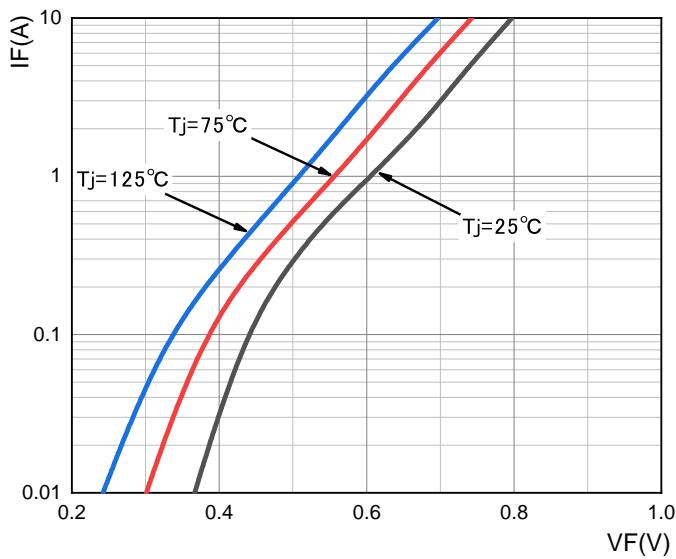
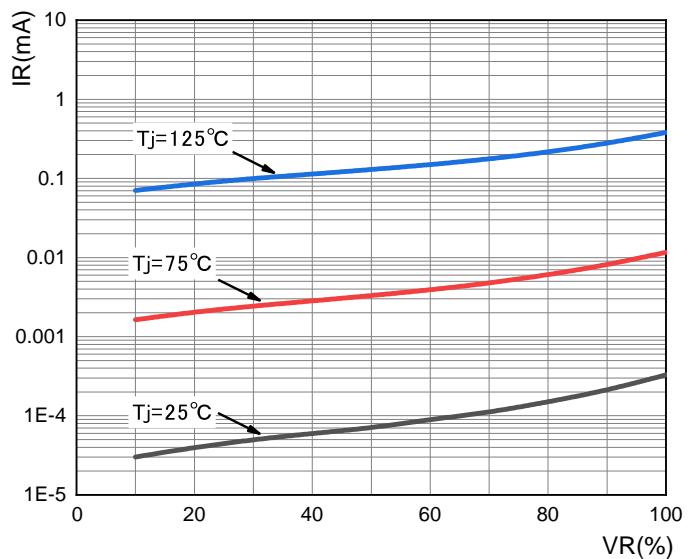
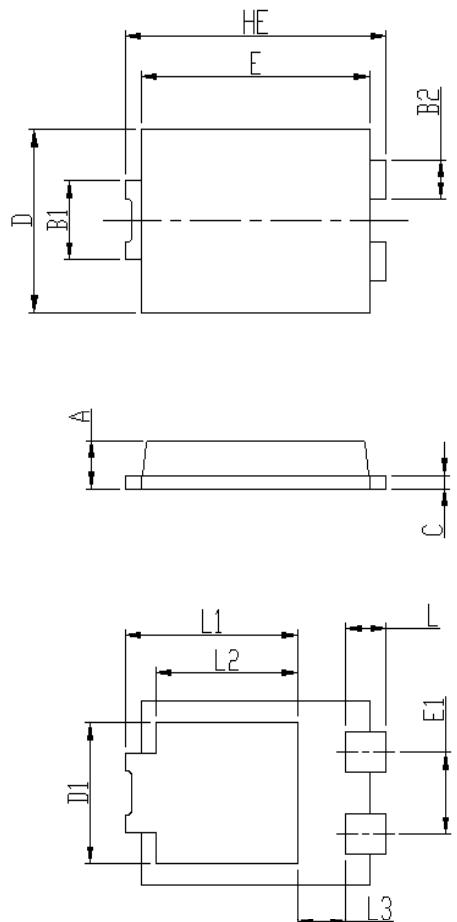


FIG.4: TYPICAL REVERSE CHARACTERISTICS

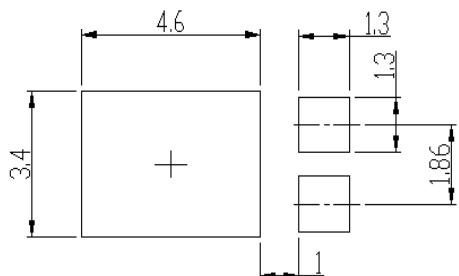


TO- 277 Package Outline Dimensions



DIM	Unit: mm		Unit: inch	
	MIN	MAX	MIN	MAX
HE	6.4	6.6	0.252	0.260
E	5.6	5.8	0.220	0.228
D	4.1	4.3	0.161	0.169
B1	1.7	1.9	0.067	0.075
B2	0.8	1	0.031	0.039
A	1.05	1.2	0.041	0.047
C	0.3	0.4	0.012	0.016
L	0.85	1.1	0.033	0.043
L1	4.2	4.4	0.165	0.173
L2	3.52 Typ.		0.139 Typ.	
L3	1.1	1.4	0.043	0.055
D1	3	3.3	0.118	0.130
E1	1.86 Typ.		0.073 Typ.	

TO- 277 Suggested Pad Layout



Note:

1. Controlling dimension:in millimeters.
- 2.General tolerance: $\pm 0.05\text{mm}$.
- 3.The pad layout is for reference purposes only.

NOTICE

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