

TO-277 Plastic-Encapsulate Diodes

Schottky Rectifier

Features

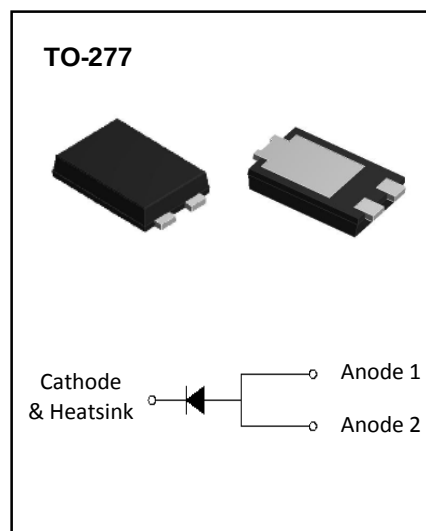
- I_O 10A
- V_{RRM} 120V
- High surge current capability
- Low V_f

Applications

- Rectifier

Marking

- ST10120L



Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	ST10120L
Repetitive Peak Reverse Voltage	V_{RRM}	V		120
Maximum RMS Voltage	V_{RMS}	V		84
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave, Resistance load, $T_L=125^{\circ}C$	10
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave, 1 cycle, $T_a=25^{\circ}C$	200
Junction Temperature	T_J	$^{\circ}C$		-55~+150
Storage Temperature	T_{STG}	$^{\circ}C$		-55~+150

Electrical Characteristics ($T_a=25^{\circ}C$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition		ST10120L
Peak Forward Voltage	V_F	V	$I_F=10A$	$T_a=25^{\circ}C$ $T_a=125^{\circ}C$	0.71(TYP) 0.74(MAX) 0.66(TYP) 0.70(MAX)
Peak Reverse Current	I_{RRM1}	mA	$V_{RM}=V_{RRM}$	$T_a=25^{\circ}C$	0.04(TYP) 0.08(MAX)
	I_{RRM2}			$T_a=125^{\circ}C$	12(TYP) 20(MAX)
Thermal Resistance(Typical)	$R_{\theta J-A}$	$^{\circ}C/W$	Between junction and ambient		80
	$R_{\theta J-L}$		Between junction and lead		5
Typical junction capacitance	C_J	nF	4.0 V, 1 MHz		0.95

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

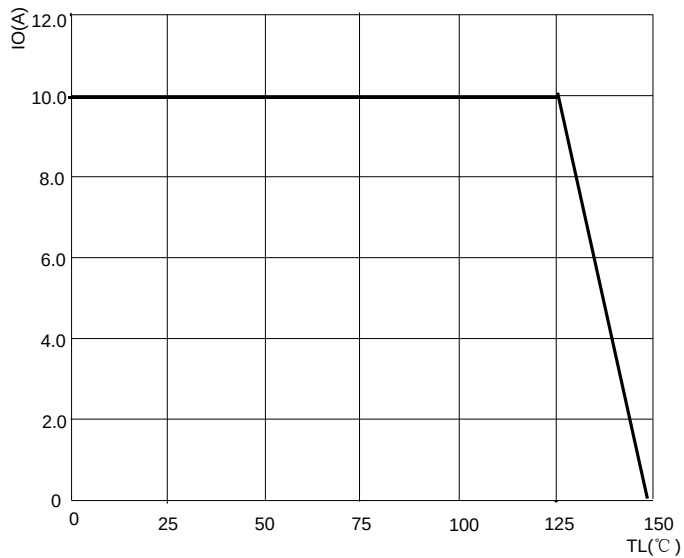


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

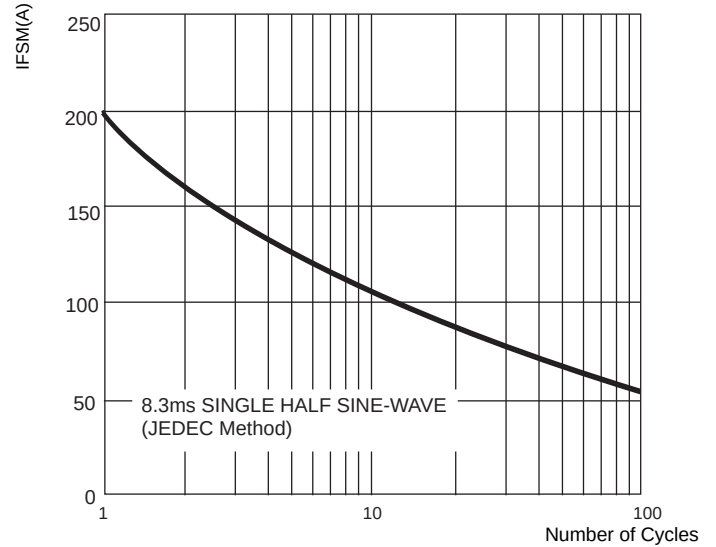


FIG3: Instantaneous Forward Voltage

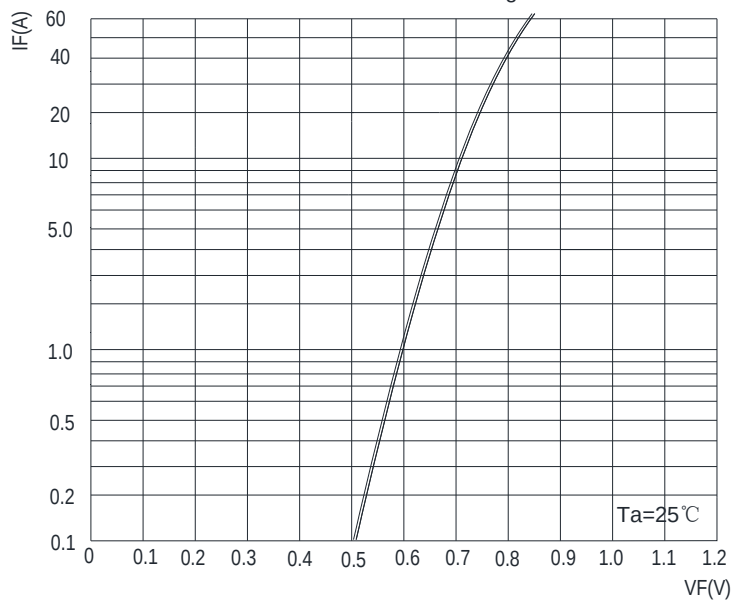
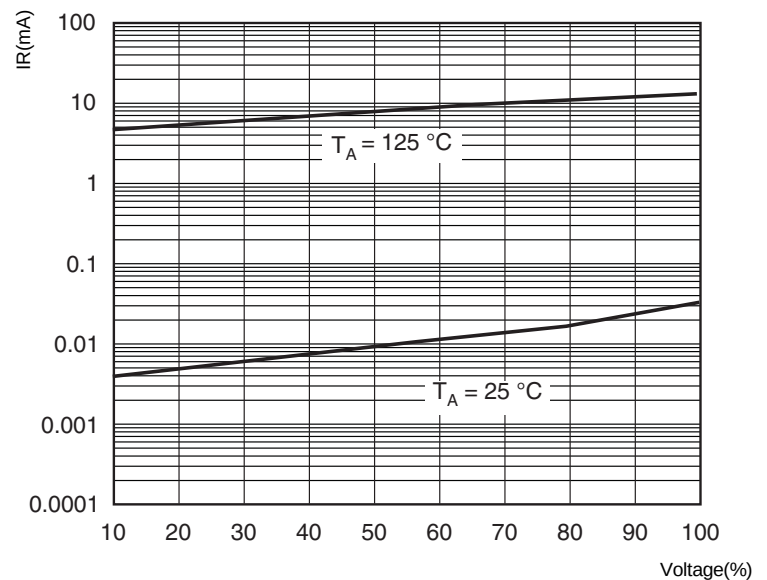
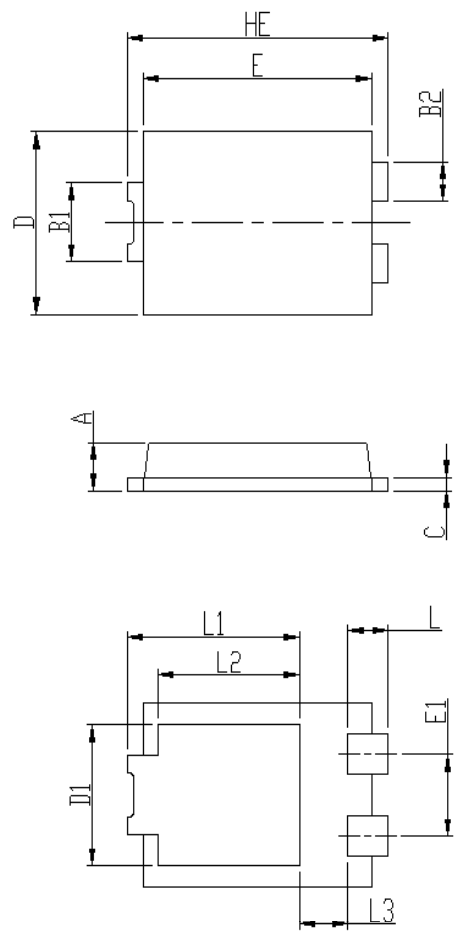


FIG.4: TYPICAL REVERSE CHARACTERISTICS

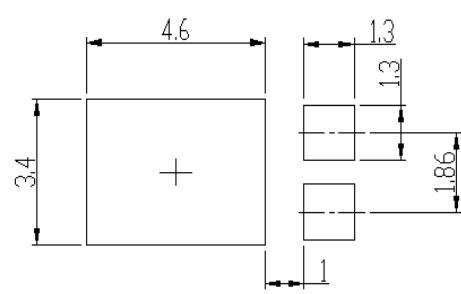


TO- 277 Package Outline Dimensions



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:± 0.05mm.
3.The pad layout is for reference purposes only.

NOTICE

JSJD reserve the right to make modifications,enhancements, improvements, corrections or other changes without further notice to any product herein .JSJD does not assume any liability arising out of the application or use of any product described herein.