

TO-277 Plastic-Encapsulate Diodes

Schottky Rectifier Diode

Features:

- $I_{F(AV)}$ 10A
- V_{RRM} 60V
- High surge current capability
- Low peak forward voltage

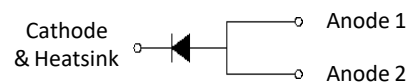
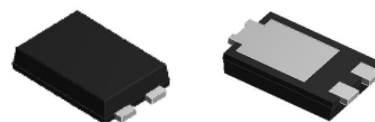
Applications:

- Rectifier

Marking

- SB1060L

TO-277



Limiting Values(Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	KSB1060L
Repetitive Peak Reverse Voltage	V_{RRM}	V		60
Maximum RMS Voltage	V_{RMS}	V		42
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave, Resistance load, $T_a=125^{\circ}\text{C}$	10
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave, 1 cycle, $T_a=25^{\circ}\text{C}$	250
Junction Temperature	T_J	$^{\circ}\text{C}$		-55 ~ +150
Storage Temperature	T_{STG}	$^{\circ}\text{C}$		-55 ~ +150

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

Item	Symbol	Unit	Test Condition		KSB1060L	
Peak Forward Voltage	V_F	V	$I_F=10.0\text{A}$	$T_a=25^{\circ}\text{C}$	0.47(TYP)	0.52(MAX)
				$T_a=125^{\circ}\text{C}$	0.40(TYP)	0.43(MAX)
Peak Reverse Current	I_{RRM1}	mA	$V_{RM}=V_{RRM}$	$T_a=25^{\circ}\text{C}$	0.08(TYP)	0.30(MAX)
	I_{RRM2}			$T_a=125^{\circ}\text{C}$	35(TYP)	40(MAX)
Thermal Resistance(Typical)	$R_{\theta J-A}$	$^{\circ}\text{C/W}$	Between junction and ambient		80	
	$R_{\theta J-L}$		Between junction and terminal		25	
Typical junction capacitance	C_J	nF	$V_R=4.0\text{ V}$, $f=1\text{ MHz}$		0.95	

Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.3" x 0.3" (8.0 mm x 8.0 mm) copper pad areas

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

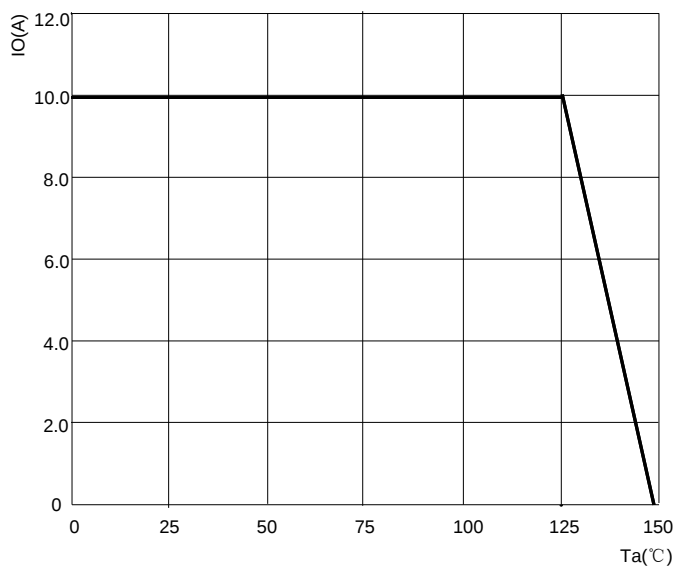


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

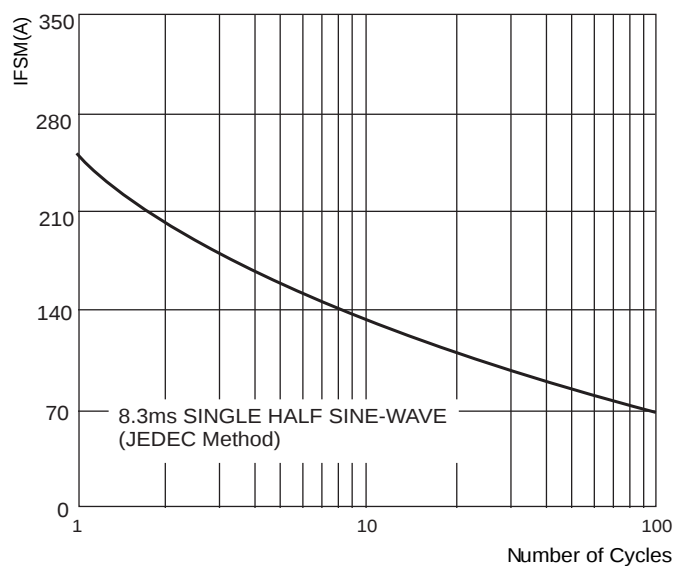


FIG.3: INSTANTANEOUS FORWARD CHARACTERISTICS

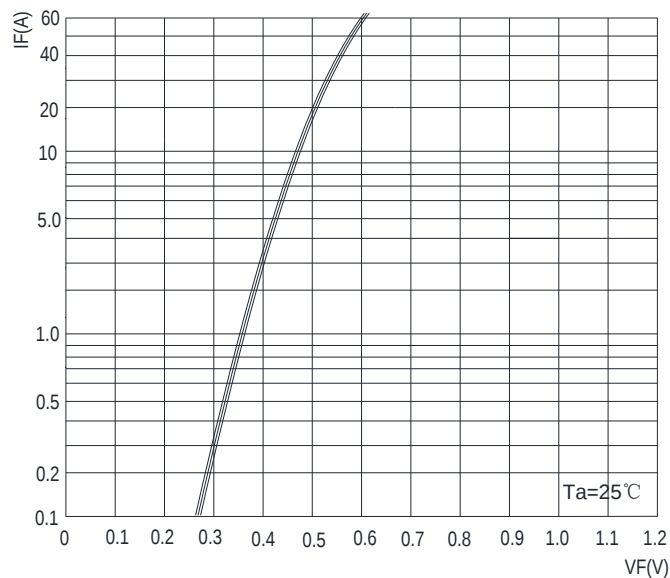
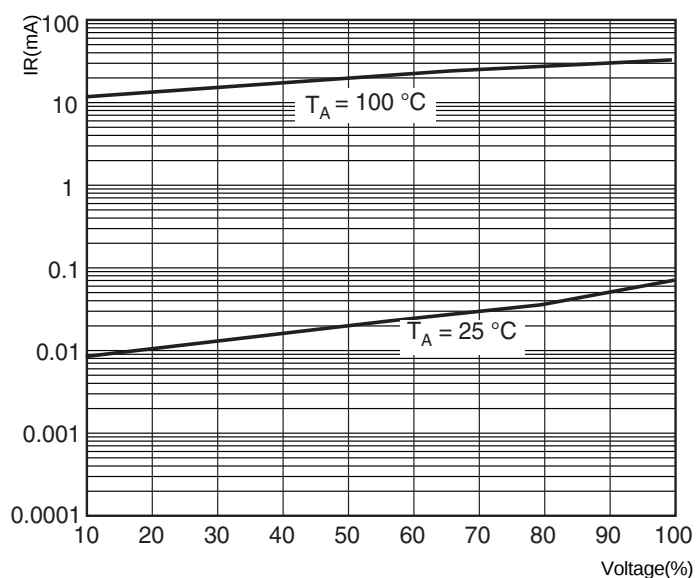
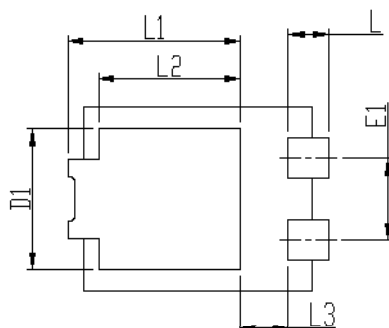
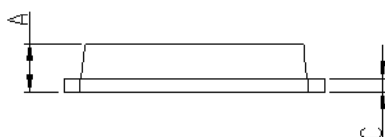
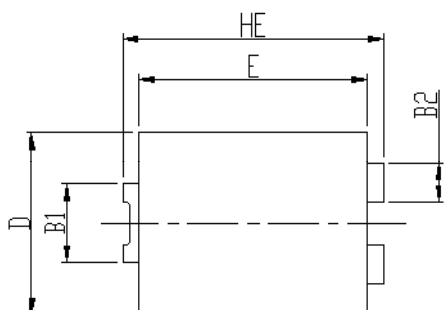


FIG.4: TYPICAL REVERSE CHARACTERISTICS

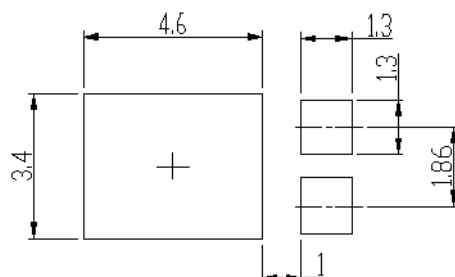


TO- 277 Package Outline Dimensions



DIM	Unit: mm		Unit: inch	
	MIN	MAX	MIN	MAX
HE	6.4	6.6	0.252	0.260
E	5.3	5.6	0.209	0.220
D	3.9	4.2	0.154	0.165
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	4.5	0.165	0.177
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.

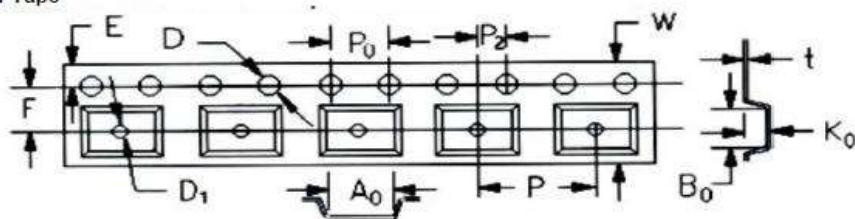
TO-277 系列（卷盤）

單位：mm

項目	卷盤	中盒	外箱
尺寸 (mm)	Φ330	338×338×39	370×370×360
數量 (只)	5K	5K×2(卷)=10K	5K×2(卷) ×7 (盒) =70K

載帶：

Embossed Carrier Tape



尺寸規格	P2	F	E	A0	B0	K0	P1	P0	W	D0
公差mm	2.0±0.07	7.5±0.1	1.75±0.1	4.38±0.1	6.9±0.1	4.0±0.1	8.0±0.07	4.0±0.07	16±0.2	1.55±0.05

卷盤(mm):

