

## TO- 277 Plastic-Encapsulate Diodes

Schottky Rectifier Diode

### Features:

- $I_{F(AV)}$  10A
- $V_{RRM}$  200 V
- High surge current capability
- Low peak forward voltage

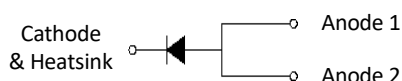
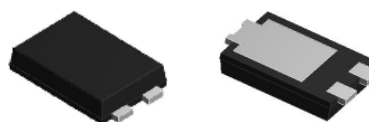
### Applications:

- Rectifier

### Marking

- SB10200

TO-277



### Limiting Values(Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	KSB10200
Repetitive Peak Reverse Voltage	$V_{RRM}$	V		200
Maximum RMS Voltage	$V_{RMS}$	V		140
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave · Resistance load · TL(Fig.1)	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=25°C Unless otherwise specified)

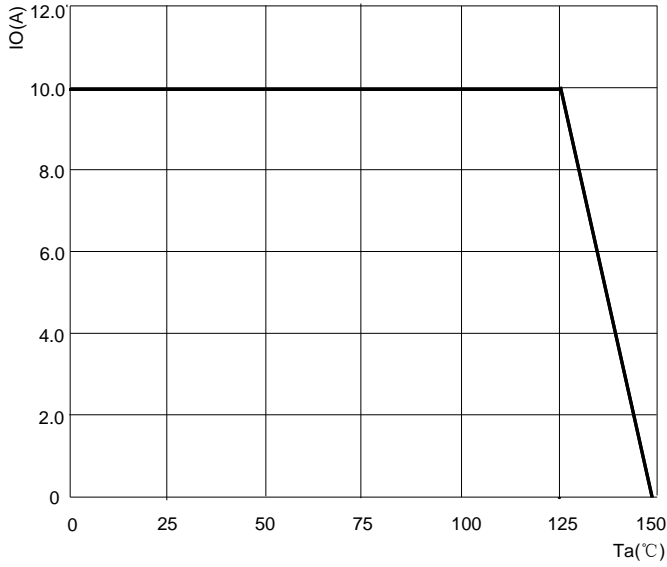
Item	Symbol	Unit	Test Condition	KSB10200	
Peak Forward Voltage	$V_F$	V	$I_F=10.0A$	$T_a=25^{\circ}C$	0.80(TYP) 0.90(MAX)
				$T_a=125^{\circ}C$	0.66(TYP) 0.74(MAX)
Peak Reverse Current	$I_{RRM1}$	mA	$V_{RM}=V_{RRM}$	$T_a=25^{\circ}C$	0.02(TYP) 0.08(MAX)
	$I_{RRM2}$			$T_a=125^{\circ}C$	10(TYP) 20(MAX)
Thermal Resistance(Typical)	$R_{\theta JA}$	$^{\circ}C/W$	Between junction and ambient	80	
	$R_{\theta JL}$		Between junction and terminal	5	
Typical junction capacitance	$C_J$	nF	$VR=4.0 V, f=1 MHz$	0.95	

### Notes:

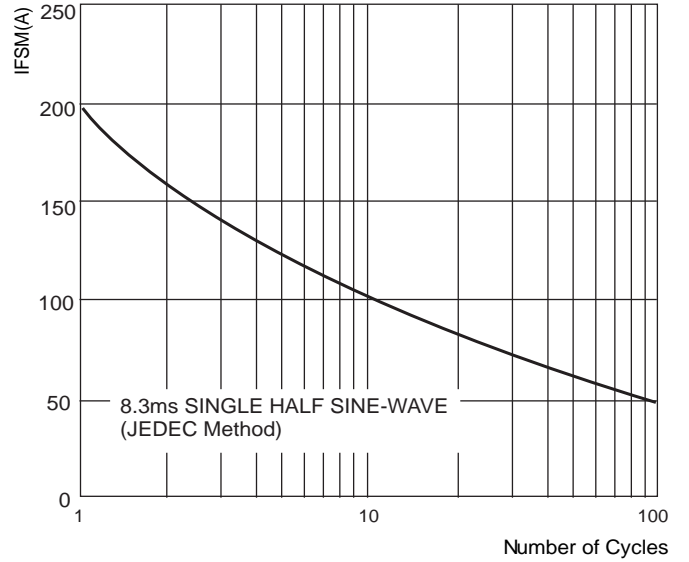
Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.3" x 0.3" (8.0 mm x 8.0 mm) copper pad areas

**Typical Characteristics**

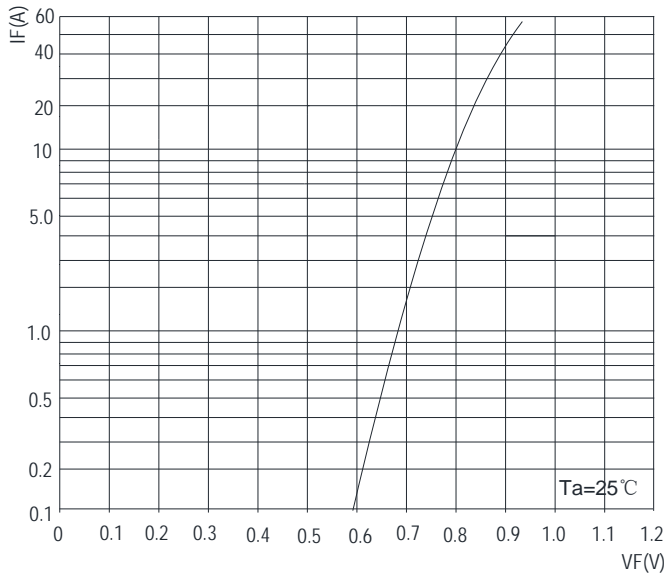
**FIG.1: FORWARD CURRENT DERATING CURVE**



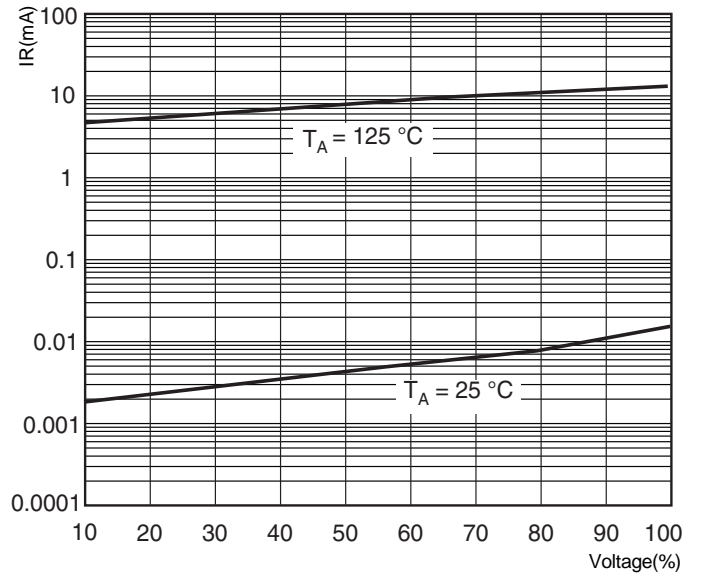
**FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



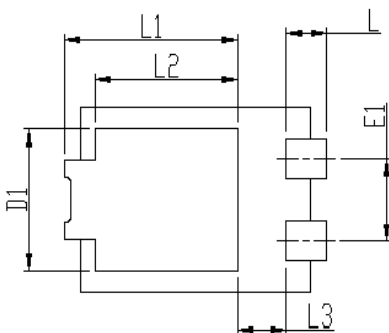
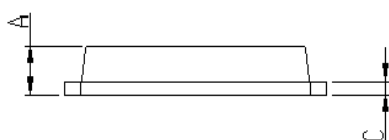
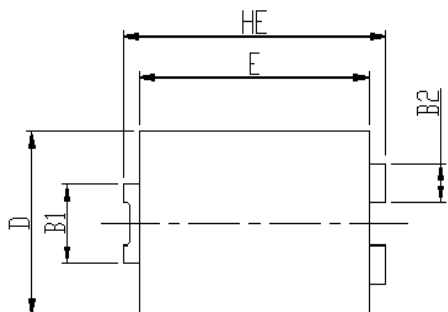
**FIG.3: INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG.4: TYPICAL REVERSE CHARACTERISTICS**

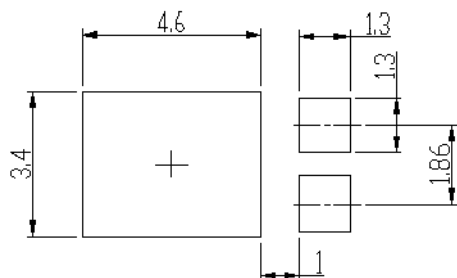


### TO- 277 Package Outline Dimensions



DIM	Unit: mm		Unit: inch	
	MIN	MAX	MIN	MAX
HE	6.4	6.6	0.252	0.260
E	5.6	5.8	0.220	0.228
D	4.	4.	0. 61	0. 69
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.

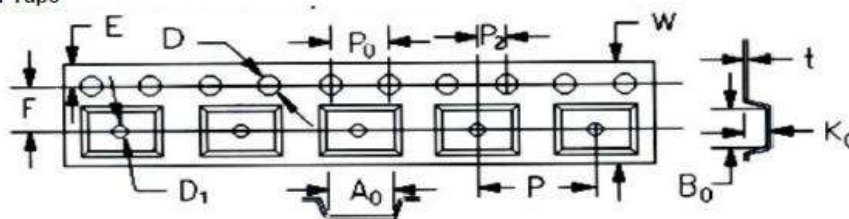
## TO-277 (卷盤)

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



尺寸规格	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):

