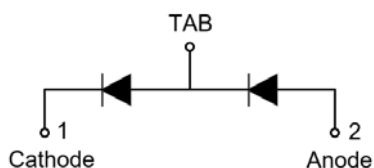
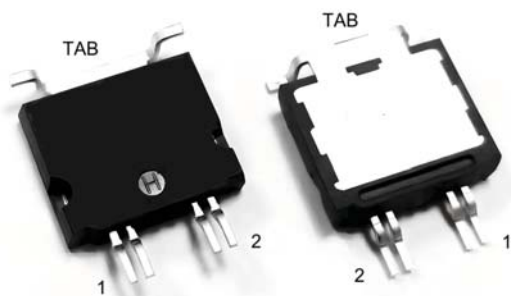


General Purpose Rectifier Diodes



Features

- High surge forward current capability
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Passivation for enhanced ruggedness and long term reliability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Application

- Input rectification

Mechanical Data

- **Package:** T2PAK-4L
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked

■Maximum Ratings (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MGS202000SC
Device marking code			MGS202000SC
Repetitive Peak Reverse Voltage	V _{RRM}	V	2000
Average Rectified Output Current @60Hz half sine-wave, R-load, T _c (FIG.1) per diode	I _o	A	20
Surge(Non-repetitive)Forward Current @60Hz half sine-wave, 1 cycle, T _j =25°C per diode	I _{FSM}	A	350
Current Squared Time @1ms≤t≤8.3ms T _j =25°C per diode	I ² t	A ² s	500
Storage Temperature	T _{stg}	°C	-55 ~ +150
Junction Temperature	T _j	°C	-55 ~ +150
Junction capacitance @4V, 1MHz per diode	C _j	pF	110

■Electrical Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MGS202000SC
Maximum instantaneous forward voltage drop per diode	V _{FM}	V	I _{FM} =20.0A T _j =25°C	1.3
Maximum instantaneous forward voltage drop double diode	V _{FM}	V	I _{FM} =20.0A	2.4
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM}	uA	V _{RM} =V _{RRM} T _a =25°C	5
			V _{RM} =V _{RRM} T _a =125°C	100



MGS202000SC

■ Thermal Characteristics (T_j=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	MGS202000SC
Thermal Resistance	Between junction and top case (镀Sn面)	R _{θJ-C-top}	°C/W	0.4
	Between junction and bottom case	R _{θJ-C-bottom}	°C/W	55

■ Ordering Information (Example)

PREFERED P/N	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MGS202000SC	/	35	/	/	Tube

■ Characteristics (Typical)

FIG1:I_o -T_c Curve

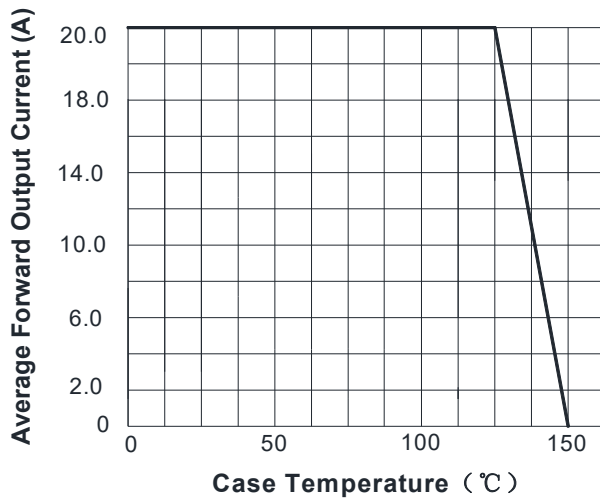


FIG2: Surge Forward Current Capability

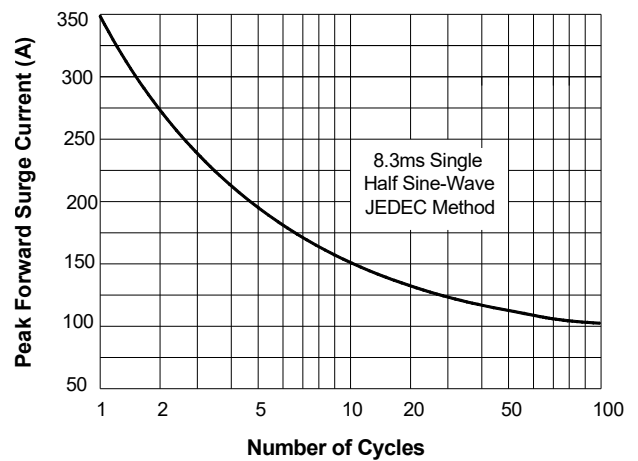


FIG3: Forward Voltage

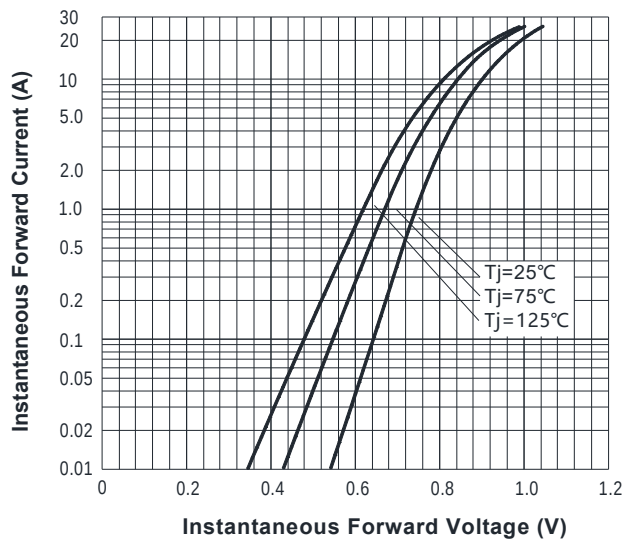
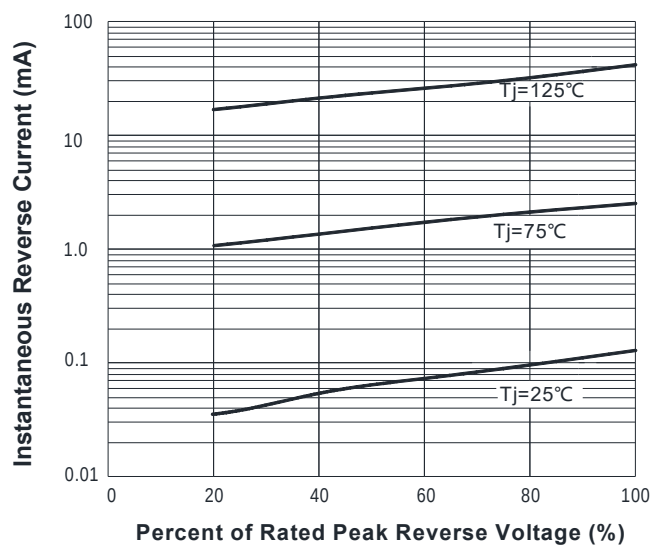
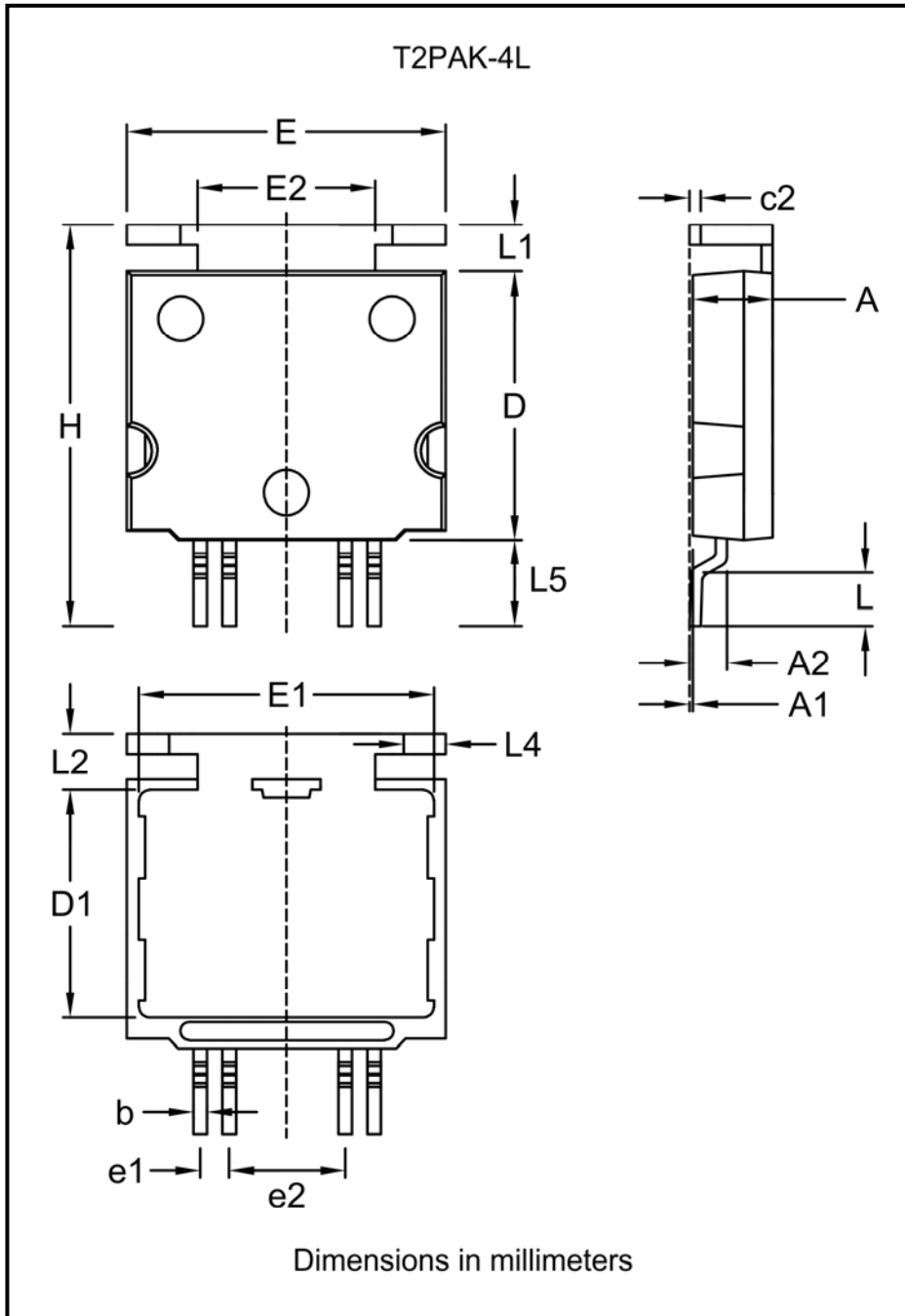


FIG4: Typical Reverse Characteristics



■Outline Dimensions



T2PAK-4L		
Dim	Min	Max
A	3.30	3.70
A1	-	0.25
A2	1.30	1.70
b	0.50	0.70
c2	0.40	0.60
D	11.70	11.90
D1	8.80	9.20
E	13.60	14.40
E1	12.00	12.80
E2	7.60	8.00
e1	1.27 BSC	
e2	5.08 BSC	
H	17.70	19.30
L	1.90	3.10
L1	2.3 REF	
L2	2.85	3.35
L4	1.25	2.45
L5	4.40 REF	



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