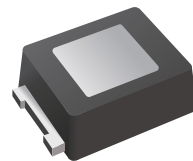


General Purpose Silicon Rectifier

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Contruction utilizes vold-free molded plastic technique
- Low reverse leakage current
- High forward surge current capability
- Lead free in comply with EU RoHS 2011/65/EU directives



Mechanical Data

- Case:SMHM
- Terminal:Leads solderable per MIL-STD-750 Method 2026
- Polarity:Color band denotes cathode end
- Mounting Position:Any

Ordering Information

Part Number	Marking	Shipping	Reel
LTM520M2	520A2	15000PCS Tape&Reel	13 inchs

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

Rating	Symbol	LTM520M2	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	2000	V
Maximum RMS voltage	V_{RMS}	1400	V
Maximum DC blocking voltage	V_{DC}	2000	V
Maximum average forward rectified current 0.375"(9.5mm) lead length at $T_c=125^{\circ}C$	$I_{(AV)}$	2	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50	A
Maximum instantaneous forward voltage at 2.0 A at 1.5 A	V_F	1.15 1.05	V
Maximum DC reverse current $T_A=25^{\circ}C$ at rated DC blocking voltage $T_A=100^{\circ}C$	I_R	1 100	μA
Typical junction capacitance (Note1)	C_J	15	pF
Typical thermal resistance (Note2)	$R_{\theta JA}$ $R_{\theta JC}$	60 6	$^{\circ}C/W$
Operating junction and storage temperature range	T_J, T_{STG}	-50 to +150	$^{\circ}C$

Note:(1) Measured at 1MHz and applied reverse voltage of 4.0V D.C.

(2) P.C.B. mounted with 0.08" × 0.08" (2 mm × 2 mm) copper pad areas.



Characteristics Curve

FIG.1 FORWARD CURRENT DERATING CURVE

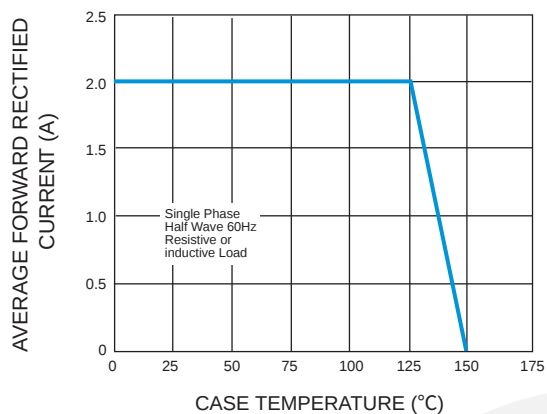


FIG.2 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

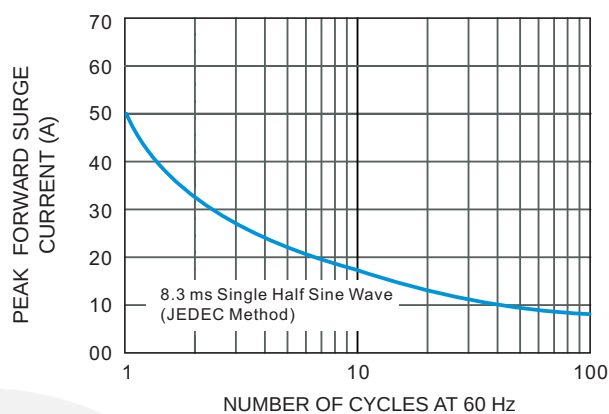


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

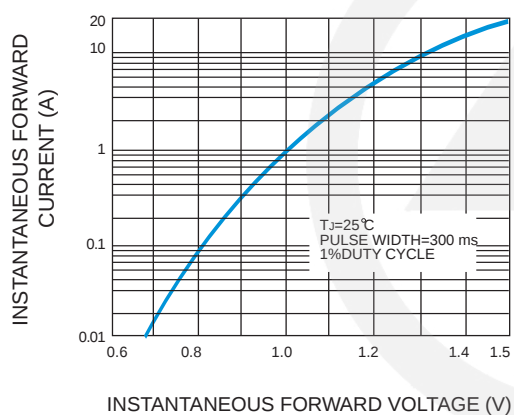


FIG.4 TYPICAL REVERSE CHARACTERISTICS

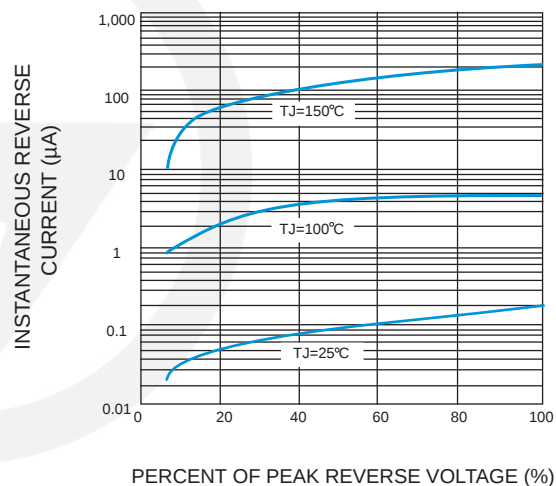
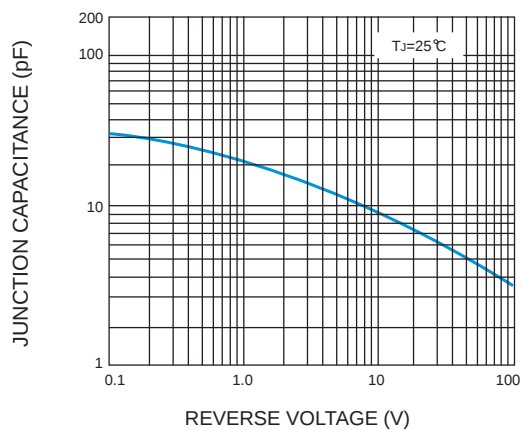
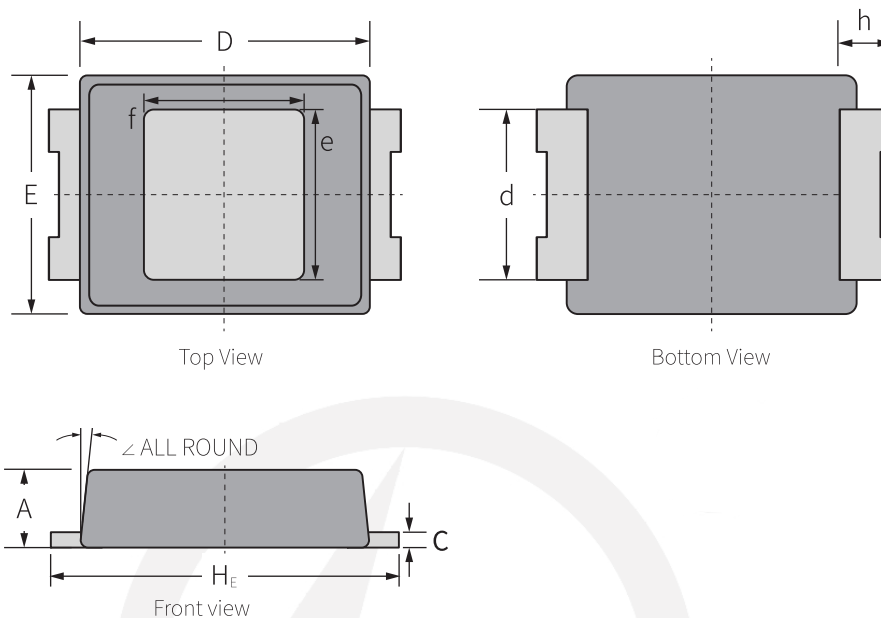


FIG.5 TYPICAL JUNCTION CAPACITANCE

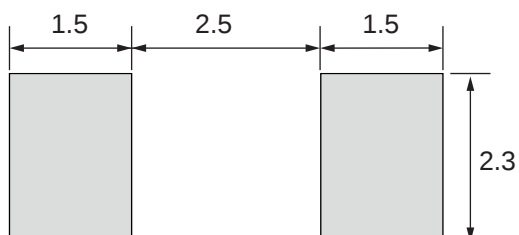


Package Outline

SMHM
Unit : mm


UNIT		A	C	D	E	H _E	d	e	f	h	∠
mm	max	0.99	0.25	3.60	3.00	4.30	2.10	2.10	2.00	0.70	6°
	min	0.83	0.15	3.20	2.60	3.70	1.90	1.90	1.78	0.50	

Suggested Pad Layout

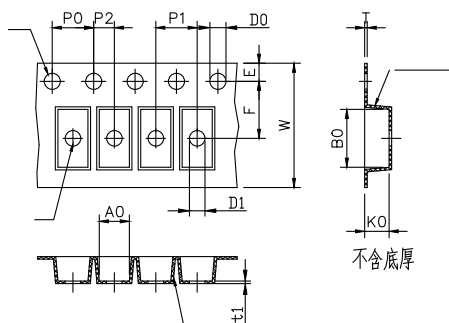
SMHM
Unit : mm

Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purpose only.



Carrier Tape Dimensions

Unit : mm

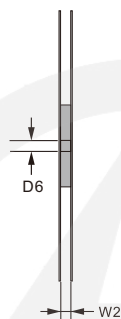
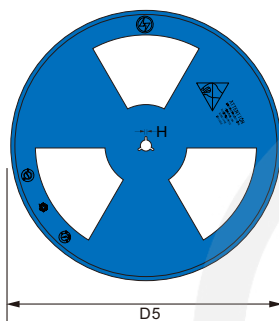


Symbol	Spec	Symbol	Spec
W	12.0±0.10	P2	2.00±0.10
E	1.75±0.10	t	0.25±0.03
F	5.50±0.10	t1	0.05+
D0	1.55±0.10	A0	3.05±0.10
D1	1.50±0.10	B0	4.15±0.10
P0	4.00±0.10	K0	1.15±0.10
P1	4.00±0.10		

Reel Dimensions

Unit : mm

13" Reel



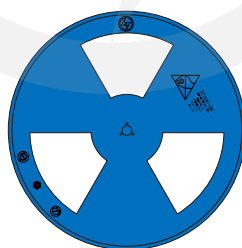
D5	Φ330.0±5.0
D6	Φ13.5±0.5
H	2.5±1.0
W2	12±2.0

Quantity: 15000PCS

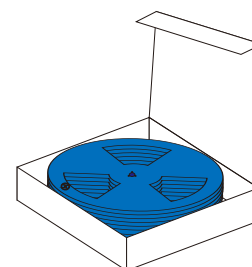
Packaging



15000 PCS/Reel



5 Reel/Inner Box
75 KPCS/Inner Box



Dim(Unit:mm)
340mm*340mm*85mm

Dim(Unit:mm)
360mm*360mm*355mm

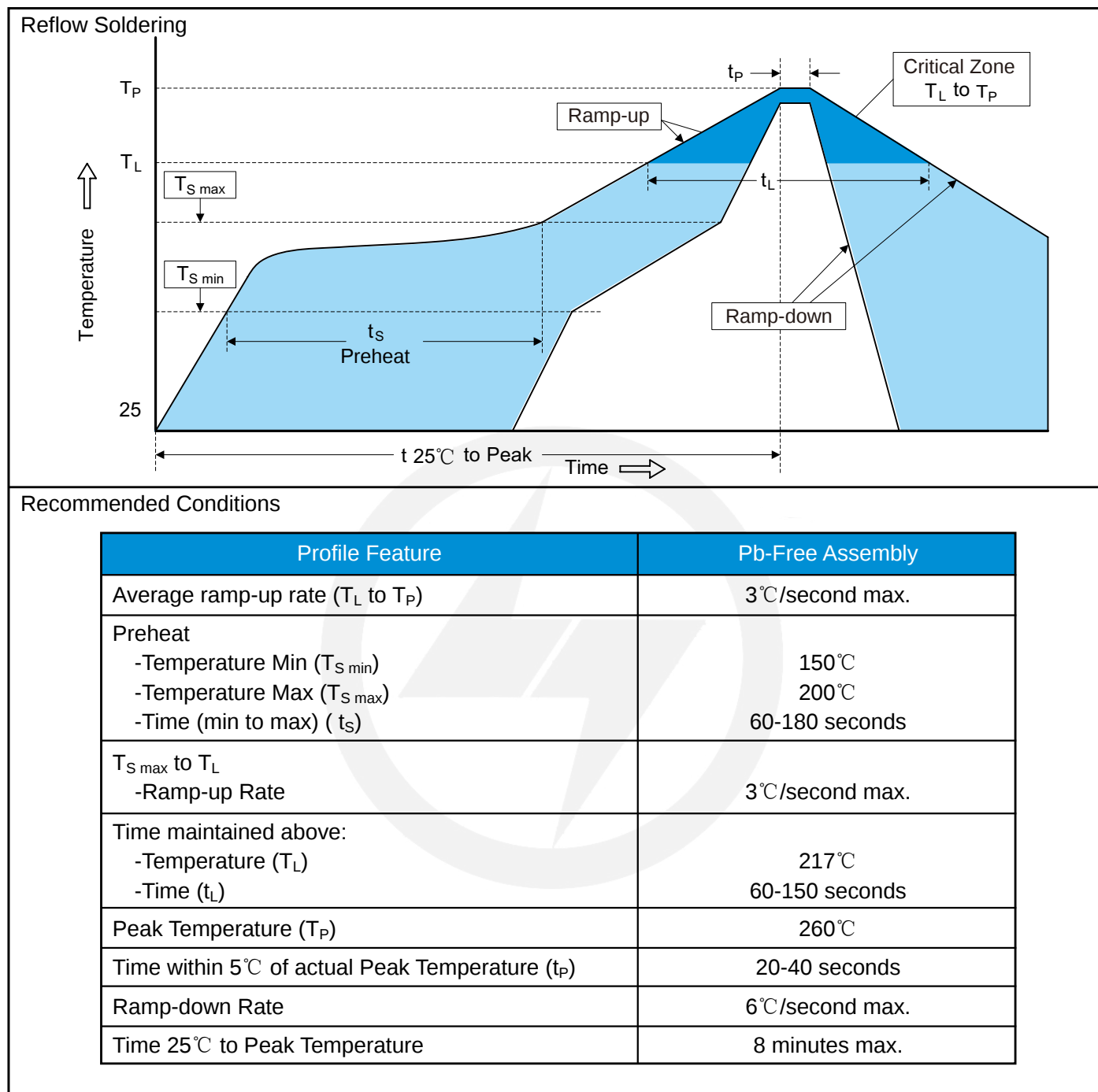


4 Boxes per carton
300 KPCS per carton

13 inches Reel



Recommended Soldering Conditons



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Version Update Information

Series NO.	Enactment/Revision Date	Effective Date	Version	Revision Content	Revision Reason	Revision Person	Note
01	2025.09.28	2025.09.28	1.0	New file	/	Ding	