

Features

- ◆ Low Power Loss,High Efficiency
- ◆ Ideally Suited for Automatic Assembly
- ◆ For Use in Low Voltage Application
- ◆ Plastic Case Material has UL Flammability Classification Rating 94V-0



Mechanical Data

- ◆ Case:Moldedplastic SMB
- ◆ Terminals: Plated leads solderable per MIL-STD-750,Method 2026 guaranteed
- ◆ Polarity: Color band dentes cathode end
- ◆ Mounting Position: Any

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified

Single phase,half wave,60Hz,resistive or inductive load

For capacitive load derate current by 20%

Type Number	SYMBOL	STPS340U	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	V
Maximum RMS Voltage	V_{RMS}	28	V
Maximum DC Blocking Voltage	V_{DC}	40	V
Average Rectified Output Current @ $T_L = 100^\circ\text{C}$	I_{FAV}	3.0	A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	80	A
Forward Voltage @ $I_F=3.0\text{A}$ (Note 1)	V_{FM}	0.55	V
Peak Reverse Current @ $T_A=25^\circ\text{C}$	I_R	0.1	mA
At Rated DC Blocking Voltage @ $T_A=100^\circ\text{C}$		10	
I^2t Rating for fusing ($t < 8.3\text{ms}$)	I^2t	26.56	A^2s
Typical Junction Capacitance (Note 2)	C_J	110	pF
Typical Thermal Resistance	$R_{\theta JA}$	70	$^\circ\text{C}/\text{W}$
Operating Temperature Range	T_J	-55 to +150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ\text{C}$

Note: 1.Pulse Test with $PW=300\mu\text{sec}$,1%Duty Cycle.

2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

Fig. 1 Forward Current Derating Curve

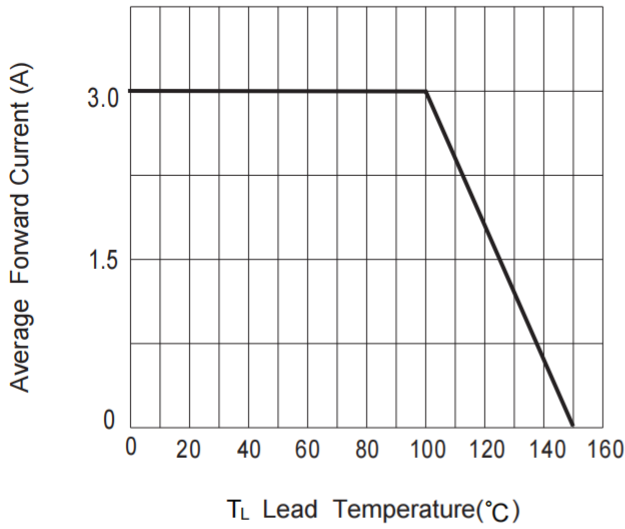


Fig. 2 Typ. Forward Characteristics

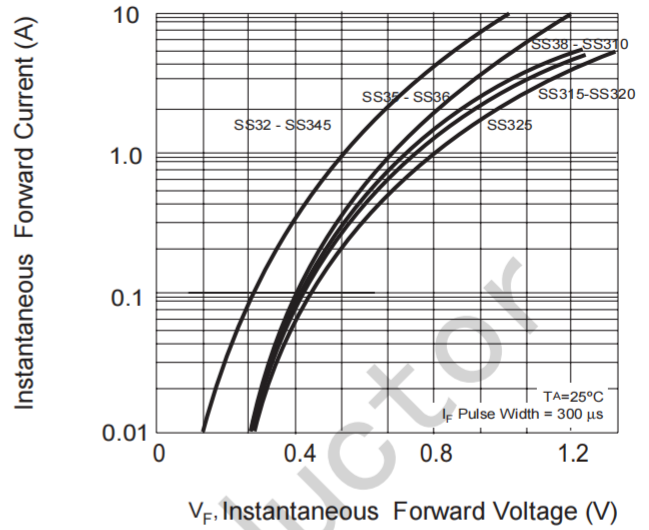


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

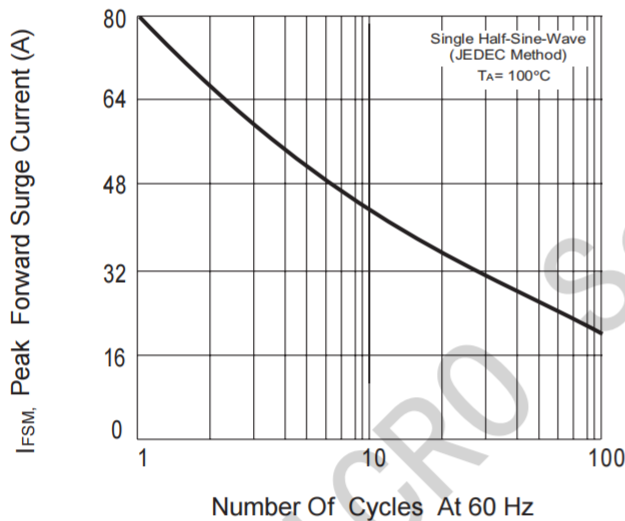


Fig.4 Typical Reverse Characteristics

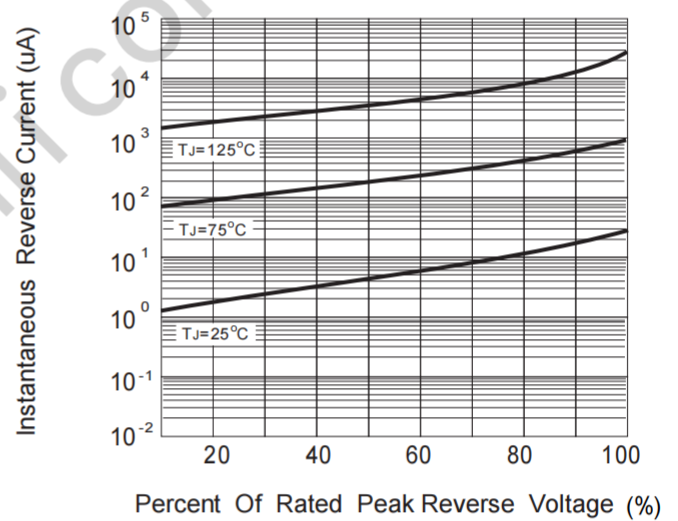
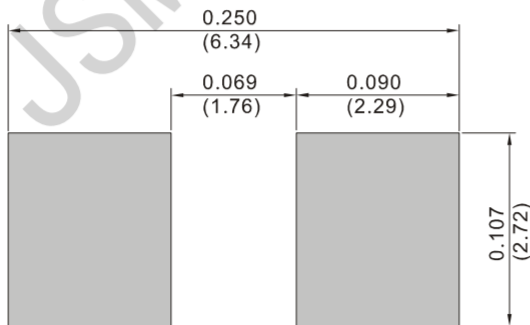


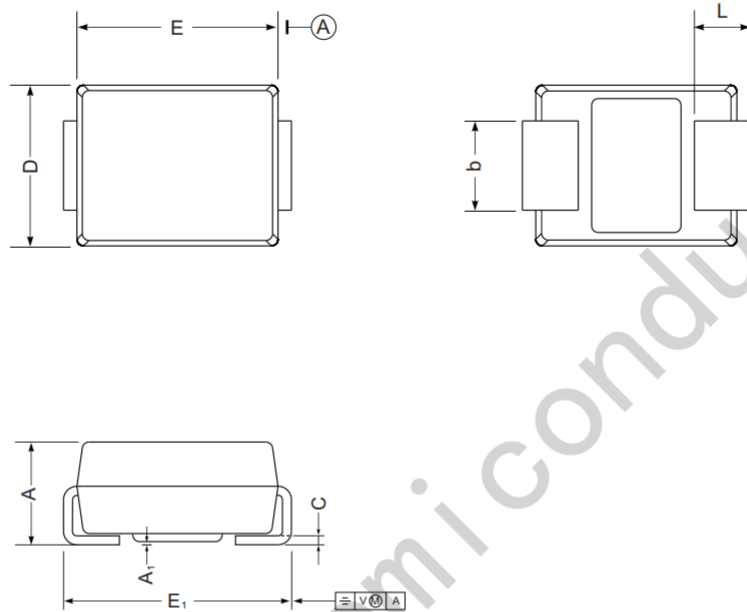
Fig.5 Mounting PAD Layout



Package Information

SMB

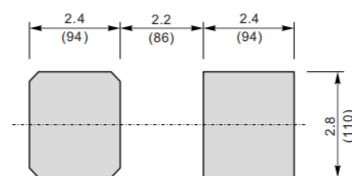
Plastic surface mounted package; 2 leads



SMB mechanical data

UNIT		A	E	D	E ₁	A ₁	L	C	b
mm	max	2.44	4.70	3.94	5.59	0.20	1.5	0.305	2.11
	min	2.13	4.06	3.3	5.08	0.05	0.8	0.152	1.91
mil	max	96	185	155	220	7.9	59	12	83
	min	84	160	130	200	2.0	32	6	75

The recommended mounting pad size



Unit: $\frac{\text{mm}}{\text{mil}}$