

/ Descriptions

Surface Mount Superfast Recovery Rectifier,Reverse Voltage:50 to600V,Forward Current:3.0A, SMB package.

/ Features

Glass Passivated Chip Junction, Fast reverse recovery time Lead free in comply with EU RoHS 2011/65/EU directives, For surface mounted applications, Halogen free product.

/ Applications

General purpose.

/ Equivalent Circuit

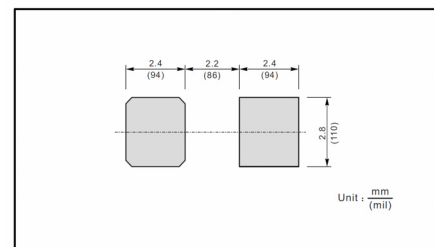


/ Pinning



PIN	DESCRIPTION
1	Cathode
2	Anode

The recommended mounting pad size



/ Marking

See Marking Instructions

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating							Unit
		ES3AB	ES3BB	ES3CB	ES3DB	ES3EB	ES3GB	ES3JB	
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	150	200	300	400	600	V
Maximum RMS voltage	V _{RMS}	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	V _{DC}	50	100	150	200	300	400	600	V
Maximum Average Forward Rectified Current at T _c = 100	I _{F AV}	3.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I _{FSM}	90							A
Typical Junction Capacitance at V _R =4V, f=1MHZ	C _j	45							pF
Typical Thermal Resistance ⁽¹⁾	R _{JA}	50							/W
	R _{JC}	16							
Operating and Storage Temperature Range	T _j , T _{stg}	-55~+150							

Note:

(1 P.C.B. mounted with 2.0 X 2.0" (5 X 5 cm) copper pad areas.

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Rating							Unit
			ES3AB	ES3BB	ES3CB	ES3DB	ES3EB	ES3GB	ES3JB	
Maximum Forward Voltage	V _F	I _F =3.0A	1.0				1.25		1.68	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	T _a =25	5.0							μA
		T _a =125	100							μA
Maximum Reverse Recovery Time	t _{rr}	I _F =0.5A I _R =1.0A I _{rr} =0.25A	35							ns

/ Electrical Characteristic Curve

Fig.1. Reverse Recovery Time Characteristic And Test Circuit Diagram.

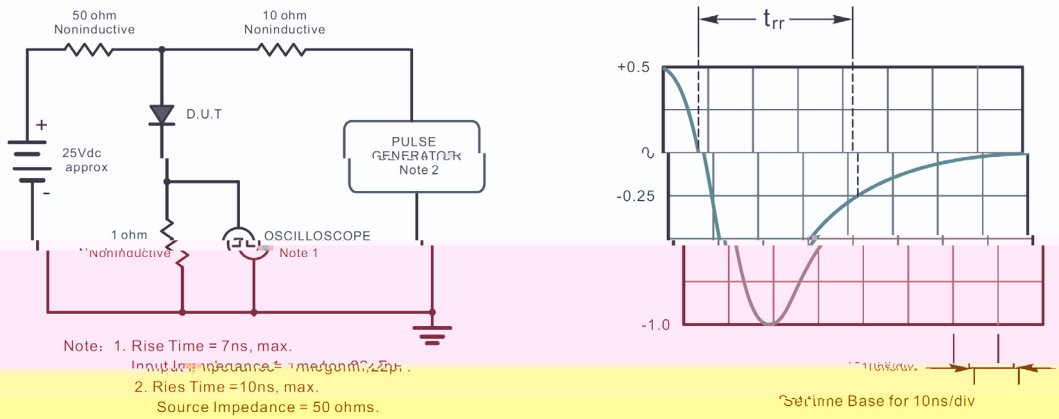


Fig.2 Maximum Average Forward Current Rating

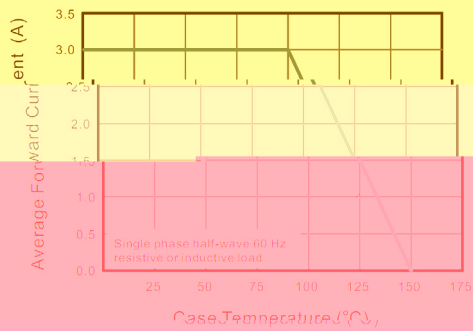


Fig.3 Typical Reverse Characteristics

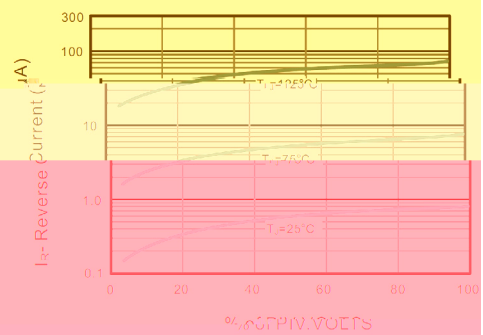


Fig.4 Typical Forward Characteristics

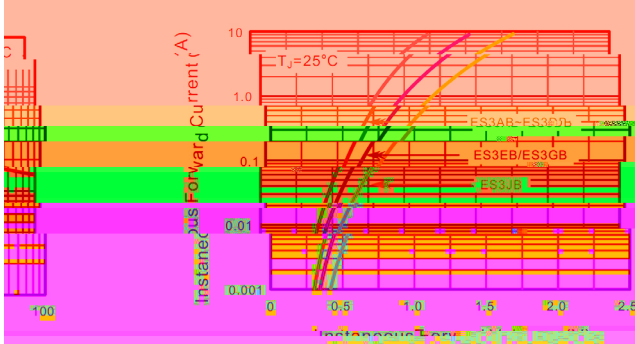
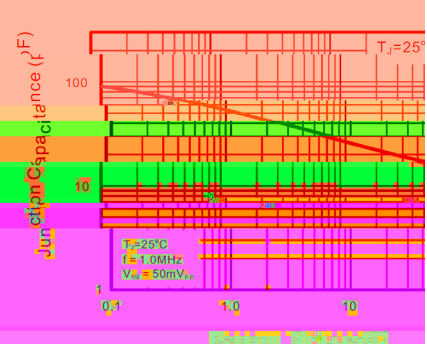
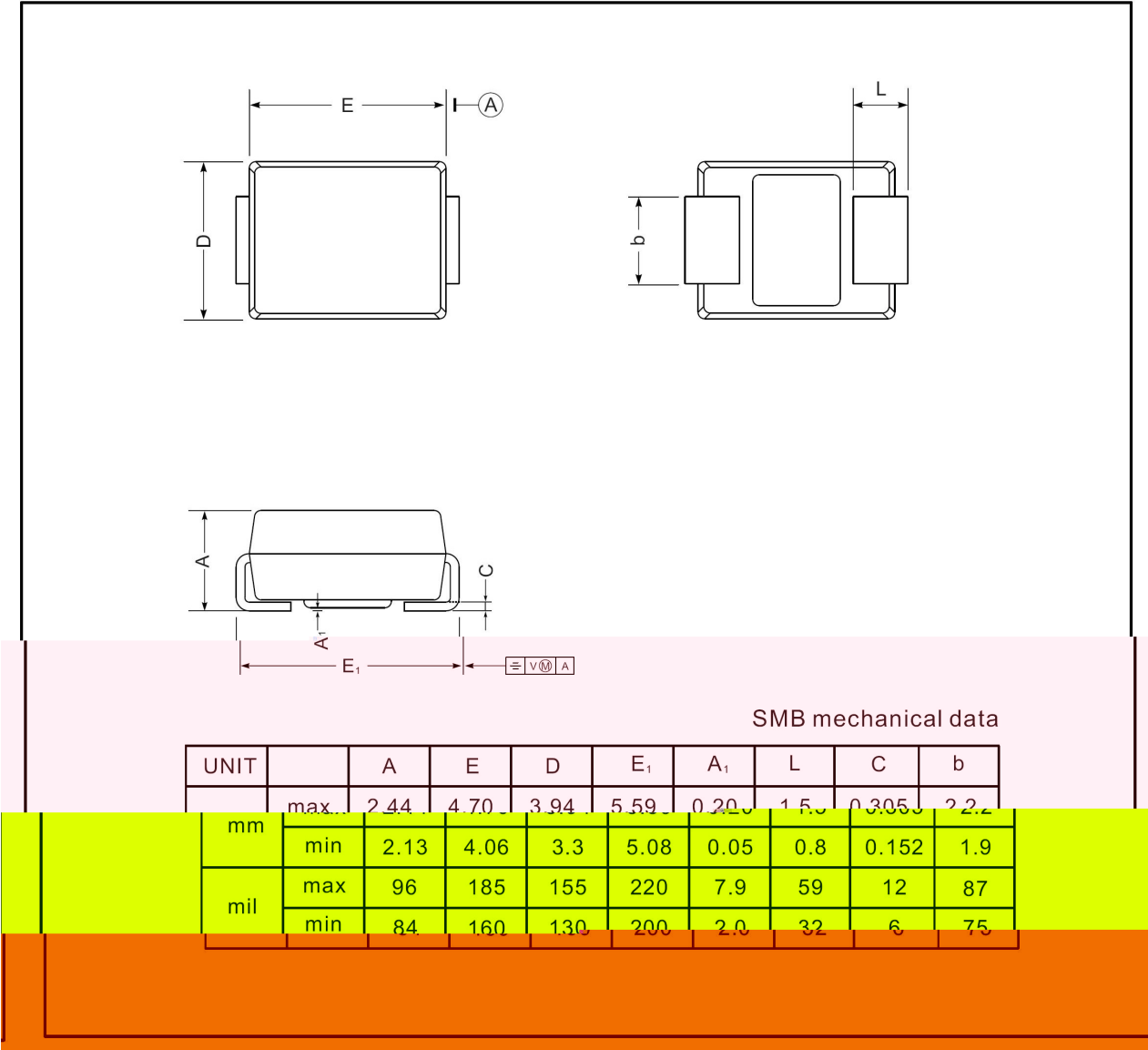


Fig.5 Typical Junction Capacitance



/ Package Dimensions

SMB

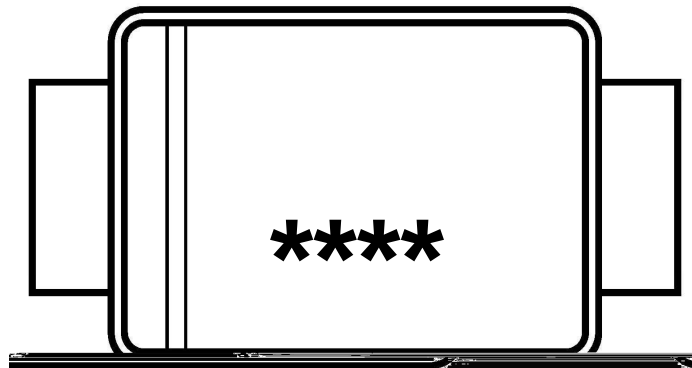


Marking

Type number	Marking code
ES3AB	ES3A
ES3BB	ES3B
ES3CB	ES3C
ES3DB	ES3D
ES3EB	ES3E
ES3FB	ES3F
ES3GB	ES3G
ES3JB	ES3J



/ Marking Instructions



Note:

Product Type Code

Lot No. Code The 1st means:YM Code The last 3 means:little Lot No
Code

ES3AB~ES3JB

Rev.A Dec.-2017