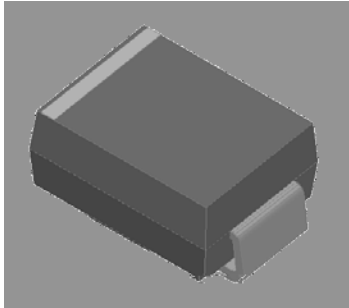




Surface Mount Super Fast Recovery Rectifier



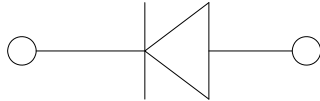
Features

- Low profile package
- Ideal for automated placement
- Glass passivated chip protection
- High forward surge capability
- Super Fast reverse recovery time
- Meets MSL level 1 per J-STD-020 & LF maximum peak of 260°C
- Part no. with suffix Q1 means AEC-Q101 qualified

Typical Applications

For use in high frequency rectification of power supplies & inverters & converters & and freewheeling diodes for consumer & automotive and telecommunication.

Mechanical Data



Terminals: Tin plated leads & solderable per J-STD-020 and JESD22-B1
Polarity: Cathode line denotes the cathode end

Maximum Ratings (Ta 125 Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	ES3ABQ	ES3BBQ	ES3CBQ	ES3DBQ	ES3FBQ	ES3GBQ	ES3HBQ	ES3JBQ
Device marking code			ES3AB	ES3BB	ES3CB	ES3DB	ES3FB	ES3GB	ES3HB	ES3JB
Repetitive peak reverse voltage	V _{RRM}	V	5	1	15	2	3	4	4	5
Average rectified output	I _O	A	3							
Surge(non-repetitive)forward current 4 ms half-sine wave 1 cycle Ta 125	I _{FSM}	A	1							
Storage temperature	T _{stg}		-55 to 150							
Junction temperature	T _J		-55 to 150							

Electrical Characteristics (Ta 125 Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	ES3ABQ	ES3BBQ	ES3CBQ	ES3DBQ	ES3FBQ	ES3GBQ	ES3HBQ	ES3JBQ	
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} 1.3 A	0.5				1.3		1.4		
Maximum reverse recovery time	t _{RR}	ns	I _F 1.5 A, I _{RR} 1.25 A	35								
Typical junction capacitance	C _J	pF	V _R 1.4 V, f 1 MHz	*								
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM}	A	Ta 125	5								
			Ta 1125	1								

% #)



ES3ABQ THRU ES3JBQ

Thermal Characteristics (T_a 125 Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	ES3ABQ	ES3BBQ	ES3CBQ	ES3DBQ	ES3FBQ	ES3GBQ	ES3HBQ	ES3JBQ
Typical Thermal resistance	R _{J-A}	/W	* 5)							
	R _{J-L}		2 5)							

Note:
 (1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 3.3 mm x 3.3 mm (0.13 in x 0.13 in) copper pad areas

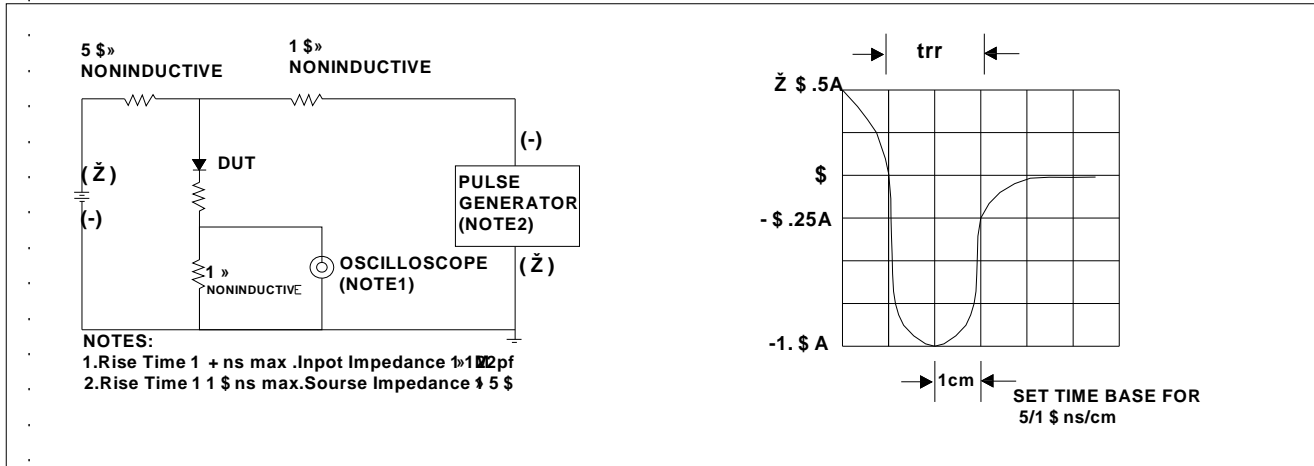
Characteristics (Typical)

		1 e	1 e	



ES3ABQ THRU ES3JBQ

Fig.5: Diagram of circuit and Testing wave form of reverse recovery time



Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
ES3ABQ-ES3JBQ	F1	Approximate 0.1g	3000	4000	13 inch reel

ES3ABQ THRU ES3JBQ

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ES3ABQ THRU ES3JBQ

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