SOD-323

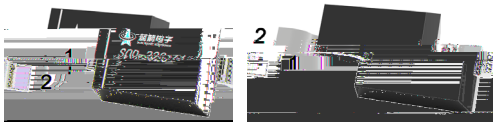
Schottky Diode in a SOD-323 Plastic Package.

AEC-Q101

Low positive pressure drop, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

General purpose, Meet the stringent requirements of automotive applications.



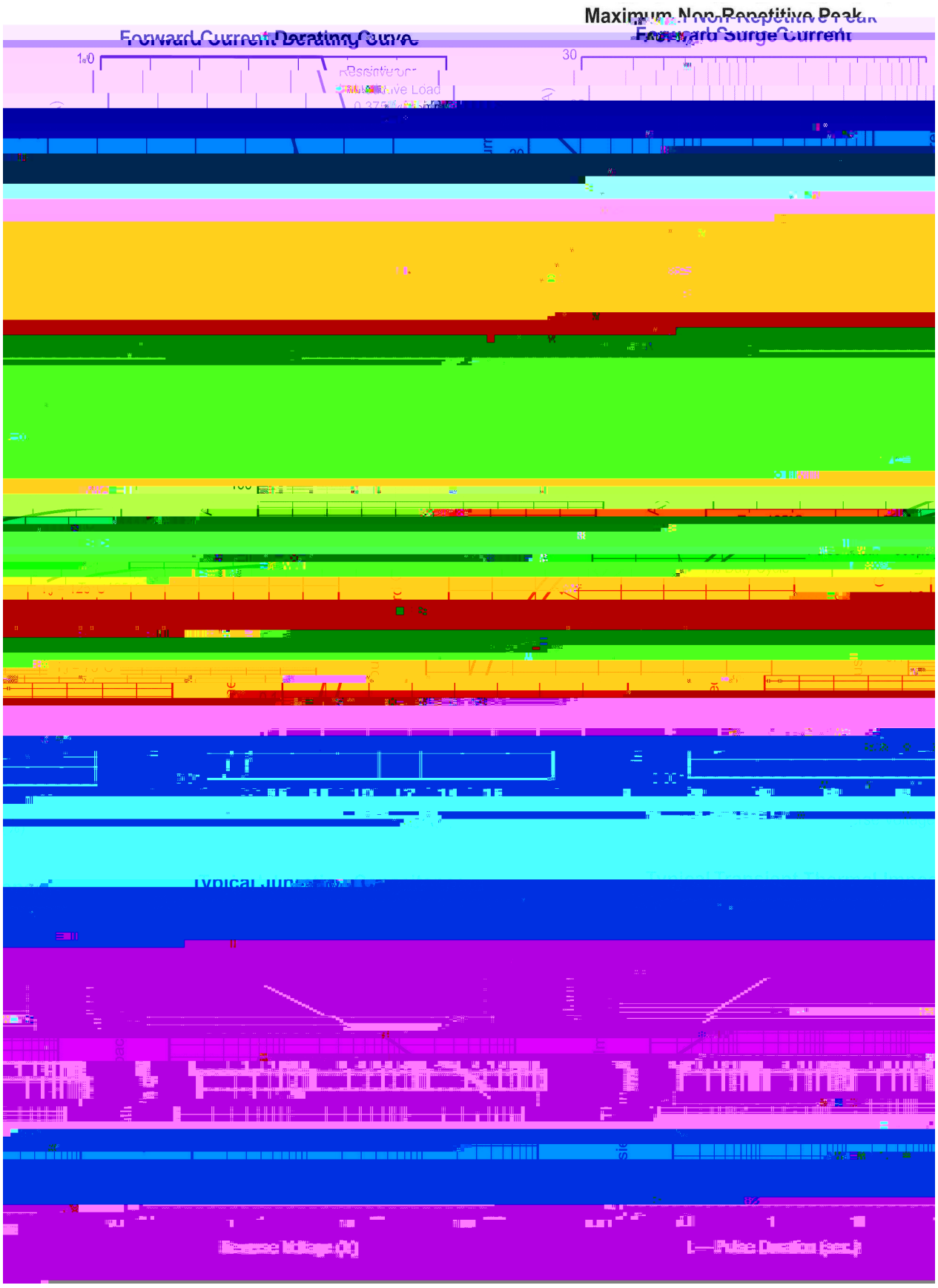


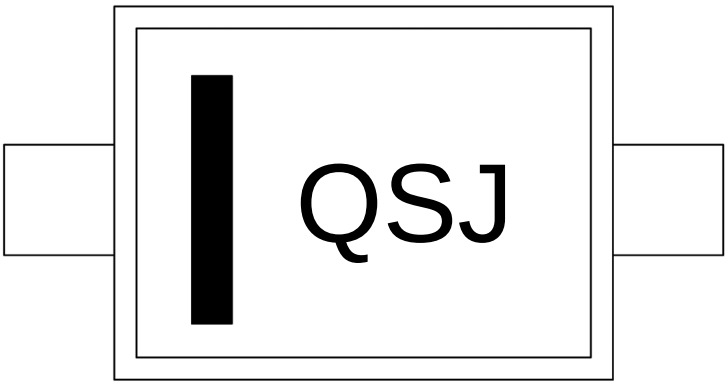
PIN1:Cathode PIN2:Anode

Model	BRB5817WSQ	BRB5818WSQ	BRB5819WSQ
Marking	QSJ	QSK	QSL

Parameter	Symbol	Rating			Unit
		BRB5817WSQ	BRB5818WSQ	BRB5819WSQ	
Peak Repetitive Reverse Voltage , Working Peak Reverse Voltage, DC Reverse Voltage	V_{RRM} V_{RWM} V_R	20	30	40	V
RMS Reverse Voltage	$V_{R\ RMS}$	14	21	28	V
Average Rectified Forward Current	I_F	1			A
Non-Repetitive Peak Forward Surge Current	I_{FSM}	25			A
Power Dissipation	P_d	200			mW
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500			/W
Junction and Storage Temperature Range	T_J,T_{stg}	-65 to 125			

Parameter	Symbol	Test Conditions		Rating		Unit
				MIN	MAX	
Reverse breakdown voltage	$V_{(BR)}$	I_R=1mA	BRB5817WSQ	20		V
			BRB5818WSQ	30		
			BRB5819WSQ	40		
Peak Forward Voltage	V_{FM}	IF=0.1A	BRB5817WSQ		0.32	V
			BRB5818WSQ		0.35	
			BRB5819WSQ		0.4	
		IF=1A	BRB5817WSQ		0.45	
			BRB5818WSQ		0.55	
			BRB5819WSQ		0.60	
		IF=3A (t<5us)	BRB5817WSQ		0.75	
			BRB5818WSQ		0.875	
			BRB5819WSQ		0.90	
Instantaneous Reverse Current	I_{RM}	V_R=V_{RWM}		1		mA
Junction Capacitance	C_J	V_R=4V f=1.0MHz		120		pF


Forward Current Derating Curve
Maximum Non-Repetitive Peak Forward Surge Current
Resistive or Inductive Load
Reverse Voltage (V)
L — Pulse Duration (sec.)



Q

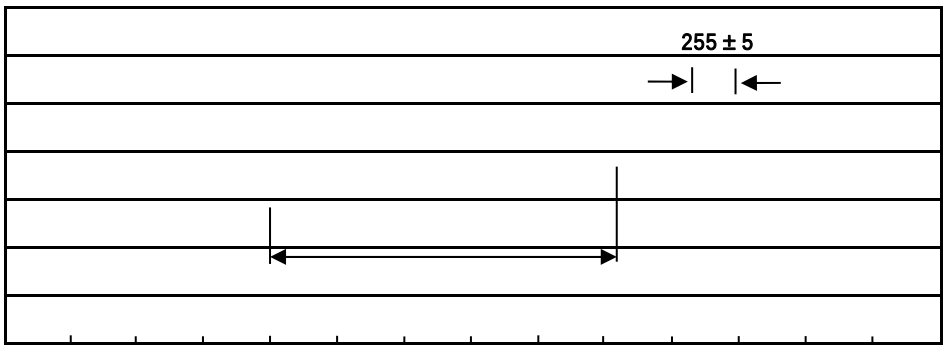
SJ

Note:

Q: Automobile halogen-free product Code

SJ: Product Type

Temperature Profile for IR Reflow Soldering(Pb-Free)



			Note:
1	150 200	60 120sec;	1.Preheating:150~200 , Time:60~120sec.
2	255±5	5±0.5sec;	2.Peak Temp.:255±5 , Duration:5±0.5sec.
3	2 10 /sec.		3. Cooling Speed: 2~10 /sec.

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ REEL

Package Type	Units					Dimension		(unit mm³)
	Units/Reel /	Reels/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Reel	Inner Box	Outer Box
SOD-323	3,000	10	30,000	6	180,000	7 ×8	180×120×180	390×385×205