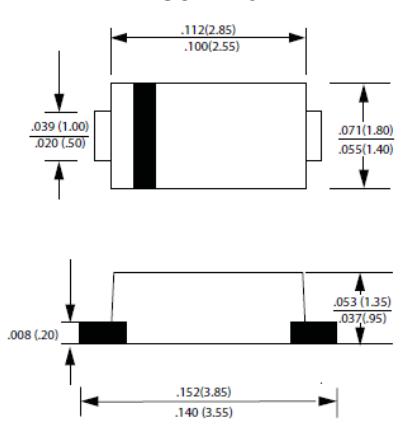


CSRB140-HF thru CSRB160-HF

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS	REVERSE VOLTAGE 40 to 60 Volts FORWARD CURRENT 1 Amperes			
<p>FEATURES</p> <ul style="list-style-type: none"> • Low profile package • Metal-Semiconductor junction with guardring • Epitaxial construction • Very Low forward voltage drop, High current capability • The plastic material carries UL recognition 94V-0 • RoHS Compliant & Halogen-Free <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> • Case: SOD-123FL molded plastic • Polarity: Color band denotes cathode 	<p>SOD-123FL</p>  <p>The drawing shows two views of the SOD-123FL package. The top view shows a rectangular package with a width of .112 (2.85) inches and .100 (2.55) inches, and a height of .039 (1.00) inches and .020 (.50) inches. The bottom view shows a package with a width of .152 (3.85) inches and .140 (3.55) inches, and a height of .053 (1.35) inches and .037 (.95) inches.</p>			
<p>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, derate current by 20%</p>				
Characteristics	Symbol	CSRB140-HF	CSRB160-HF	Unit
Marking code		C4	C6	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	60	V
Maximum RMS Voltage	V_{RMS}	28	42	V
Maximum DC blocking voltage	V_{DC}	40	60	V
Maximum Instantaneous Forward Voltage @25°C	V_F	0.52	0.65	V
Maximum DC Reverse Current @ 25°C @ 100°C	I_R	0.5 5		mA
Maximum Average Forward Rectified Current	I_F	1		A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load	I_{FSM}	25		A
Typical Junction Capacitance (Note 1)	C_J	70		pF
Typical Thermal Resistance (Note 2)	$R_{\theta Ja}$	310		°C/W
Operating Temperature Range	T_J	-55 to +150		°C
Storage Temperature Range	T_{STG}	-55 to +150		°C
<p>Note 1 : Measured at 1MHz and applied reverse of 4V DC.</p> <p>Note 2 : FR-4PCB , 2 oz 0.7mmx1.2mm copper pad.</p>				

Rating and Characteristic Curves

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

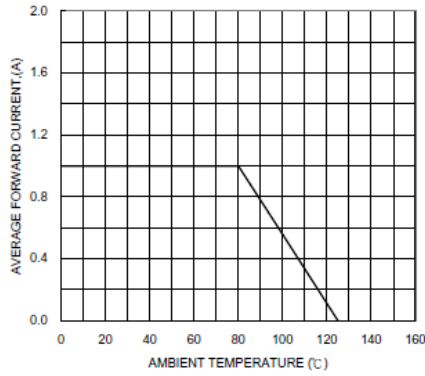


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

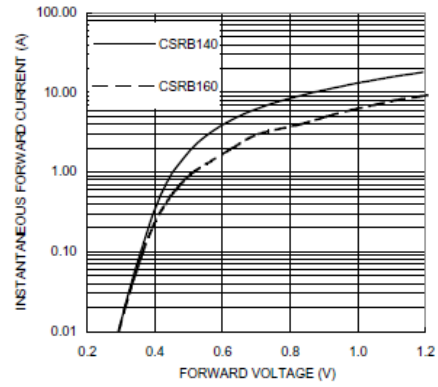


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

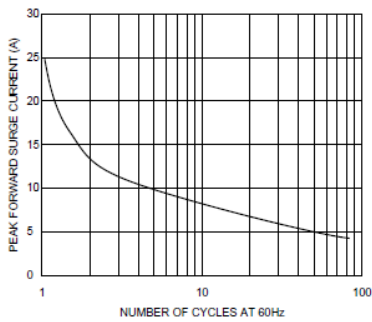


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

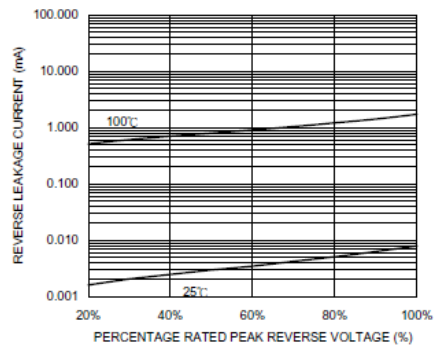


FIG. 5-TYPICAL JUNCTION CAPACITANCE

