



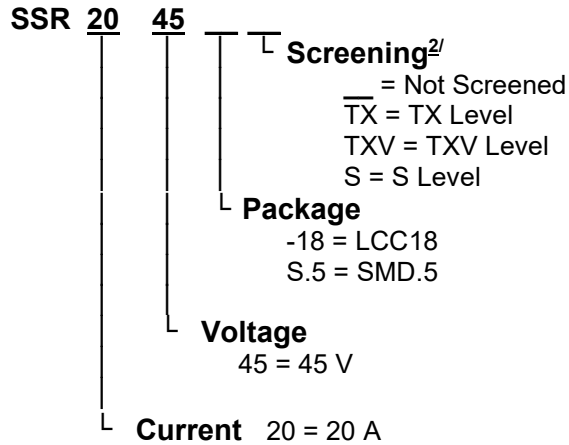
Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, CA 90638
Phone: (562) 404-4474 * Fax: (562) 404-1773
ssdi@ssdi-power.com * www.ssdi-power.com

SSR2045-18 SSR2045S.5

Designer's Data Sheet

Part Number / Ordering Information^{1/}



20 AMP SCHOTTKY RECTIFIER 45 VOLTS

FEATURES:

- Low Reverse Leakage
- Low Forward Voltage Drop
- Guard Ring for Overvoltage Protection
- Hermetically Sealed Package
- Custom Lead Forming Available
- Eutectic Die Attach
- 175°C Operating Temperature
- Replacement for IR 8EQ045
- TX, TXV, and S Level Screening Available - Consult Factory^{2/}

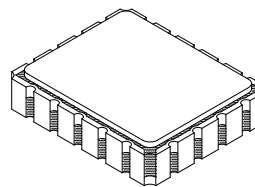
MAXIMUM RATINGS^{3/}

	Symbol	Value	Unit
Peak Repetitive Reverse and DC Blocking Voltage	V_{RRM} V_{RWM} V_R	45	V
Average Rectified Forward Current (Resistive load, 60 Hz, sine wave, $T_A = 25^\circ\text{C}$)	I_o	20	A
Peak Surge Current (8.3 ms pulse, half sine wave superimposed on I_o , one pulse, $T_A = 25^\circ\text{C}$)	I_{FSM}	100	A
Operating & Storage Temperature	T_{OP} & T_{stg}	-65 to +175	°C
Maximum Thermal Resistance (Junction to Case)	SMD.5 LCC-18 $R_{\theta JC}$	2.2 5.0	°C/W

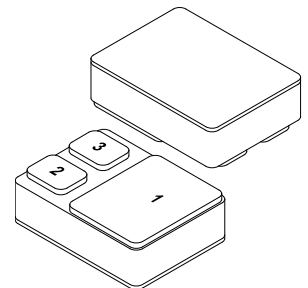
NOTES:

- ^{1/} For ordering information, price, and availability - contact factory.
^{2/} Screening based on MIL-PRF-19500. Screening flows available on request.
^{3/} Unless otherwise specified, all electrical characteristics @ 25°C.

LCC-18 (-18)



SMD.5 (S.5)



NOTE: All specifications are subject to change without notification.
SCD's for these devices should be reviewed by SSDI prior to release.

DATA SHEET #: SH0129C

DOCX



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, CA 90638
Phone: (562) 404-4474 * Fax: (562) 404-1773
ssdi@ssdi-power.com * www.ssdi-power.com

SSR2045-18

SSR2045S.5

ELECTRICAL CHARACTERISTICS (per leg) ^{3/}		Symbol	Typ	Max	Unit
Instantaneous Forward Voltage Drop (T _A = 25°C, 300 μsec pulse)	I _F = 10 A	V _{F1}	550	620	mV _{DC}
	I _F = 20 A	V _{F2}	635	710	
Instantaneous Forward Voltage Drop (T _A = -55°C, 300 μsec pulse)	I _F = 10 A	V _{F3}	615	700	mV _{DC}
	I _F = 20 A	V _{F4}	670	750	
Instantaneous Forward Voltage Drop (T _A = 125°C, 300 μsec pulse)	I _F = 10 A	V _{F5}	470	550	mV _{DC}
	I _F = 20 A	V _{F6}	585	670	
Reverse Leakage Current (Rated V _R , T _A = 25°C, 300 μsec pulse minimum)		I _{R1}	5	100	μA
Reverse Leakage Current (Rated V _R , T _A = 125°C, 300 μsec pulse minimum)		I _{R2}	6	15	mA
Junction Capacitance (V _R = 5 V, f = 1 MHz, T _A = 25°C)		C _J	660	750	pF

Package Outline: LCC-18 (-18)

