



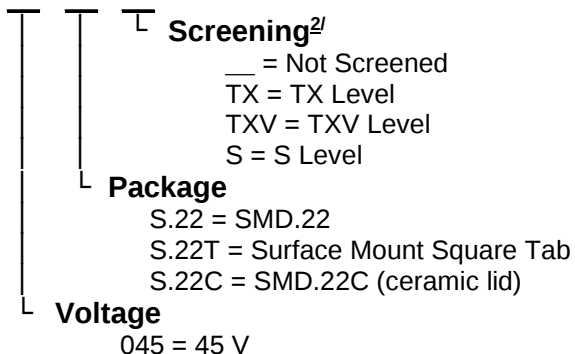
Solid State Devices, Inc.

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

Designer's Data Sheet

Part Number / Ordering Information^{1/}

SSR08



SSR08045S.22

8 AMP
HERMETIC SURFACE MOUNT
SCHOTTKY RECTIFIER
45 VOLTS

FEATURES:

- Extremely small footprint
- Extremely low forward voltage drop
- Low reverse leakage
- Hermetically sealed surface mount package
- 150°C maximum operating junction temperature
- Weight: 0.12 g (typical)
- TX, TXV, and S level screening available - consult factory^{2/}

MAXIMUM RATINGS^{3/ 4/}

	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	8	A
Peak Surge Current (8.3 ms pulse, half sine wave, allow junction to reach equilibrium between pulses, $T_A = 25^\circ\text{C}$)	I_{FSM}	100	A
Operating Temperature	T_{OP}	-65 to +150	°C
Storage Temperature	T_{STG}	-65 to +150	°C
Maximum Power Dissipation	P_D	10	W
Maximum Thermal Resistance (Junction to Case)	$R_{\theta JC}$	12	°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.
- ^{4/} For optimal performance, connect anode terminals together.

SMD.22 (S.22)



SMD.22C (S.22C)



SM Square Tab (S.22T)



(dime used for size reference)

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

DATA SHEET #: SH0132E

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

SSR08045S.22

ELECTRICAL CHARACTERISTICS ^{4/}		Symbol	Min	Typ	Max	Unit
Instantaneous Forward Voltage Drop (T _A = 25°C, 300 µsec pulse)	I _F = 0.5 A	V _{F1}	-	0.33	-	V _{DC}
	I _F = 1.0 A	V _{F2}	-	0.36	0.40	
	I _F = 3.0 A	V _{F3}	-	0.45	-	
	I _F = 5.0 A	V _{F4}	-	0.52	0.56	
	I _F = 8.0 A	V _{F5}	-	0.61	0.66	
Instantaneous Forward Voltage Drop (T _A = 100°C, 300 µsec pulse)	I _F = 0.5 A	V _{F6}	-	0.23	-	V _{DC}
	I _F = 1.0 A	V _{F7}	-	0.27	0.33	
	I _F = 3.0 A	V _{F8}	-	0.38	-	
	I _F = 5.0 A	V _{F9}	-	0.49	0.55	
	I _F = 8.0 A	V _{F10}	-	0.60	-	
Instantaneous Forward Voltage Drop (T _A = 125°C, 300 µsec pulse)	I _F = 0.5 A	V _{F11}	-	0.20	-	V _{DC}
	I _F = 1.0 A	V _{F12}	-	0.24	0.30	
	I _F = 3.0 A	V _{F13}	-	0.36	-	
	I _F = 5.0 A	V _{F14}	-	0.46	0.52	
	I _F = 8.0 A	V _{F15}	-	0.61	0.68	
Instantaneous Forward Voltage Drop (T _A = 150°C, 300 µsec pulse)	I _F = 0.5 A	V _{F16}	-	0.16	-	V _{DC}
	I _F = 1.0 A	V _{F17}	-	0.21	-	
	I _F = 3.0 A	V _{F18}	-	0.34	-	
	I _F = 5.0 A	V _{F19}	-	0.45	-	
	I _F = 8.0 A	V _{F20}	-	0.59	-	
Instantaneous Forward Voltage Drop (T _A = -55°C, 300 µsec pulse)	I _F = 0.5 A	V _{F21}	-	0.43	-	V _{DC}
	I _F = 1.0 A	V _{F22}	-	0.45	-	
	I _F = 3.0 A	V _{F23}	-	0.52	-	
	I _F = 5.0 A	V _{F24}	-	0.58	-	
	I _F = 8.0 A	V _{F25}	-	0.65	-	
Reverse Leakage Current (Rated V _R , 300 µsec pulse minimum)	T _A = 25°C	I _{R1}	-	0.05	0.15	mA
	T _A = 100°C	I _{R2}	-	10	30	
	T _A = 125°C	I _{R3}	-	20	-	
	T _A = 150°C	I _{R4}	-	30	-	
Junction Capacitance (f = 1 MHz, T _A = 25°C)	V _R = 5 V	C _J	-	250	-	pF
	V _R = 10 V		-	180	250	

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

DATA SHEET #: SH0132E

DOCX



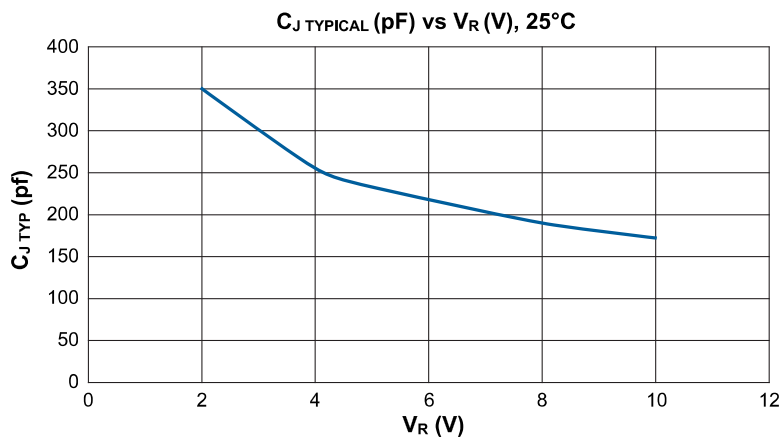
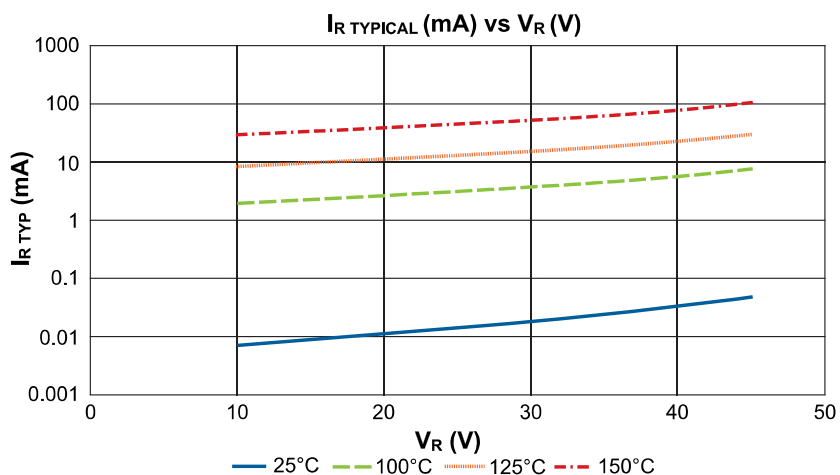
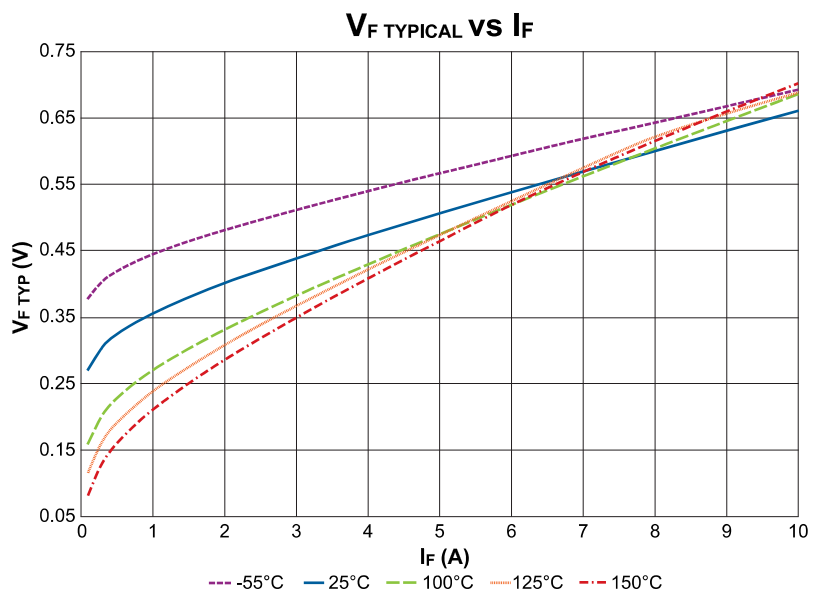
Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, CA 90638

Phone: (562) 404-4474 * Fax: (562) 404-1773

ssdi@ssdi-power.com * www.ssdi-power.com

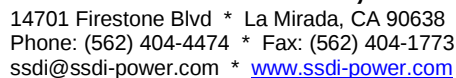
SSR08045S.22



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

DATA SHEET #: SH0132E

DOCX



DOCX