



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, CA 90638

Phone: (562) 404-7855 * Fax: (562) 404-1773

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

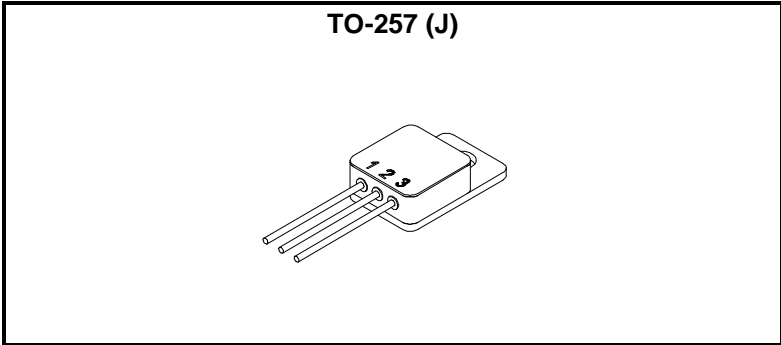
**SSR1645CTJ
SSR1645CAJ
SSR1645DJ**

**16A 45 V
SCHOTTKY
RECTIFIER**

DESIGNER'S DATA SHEET	
Part Number / Ordering Information ^{1/}	
SSR1645	<u>CT</u> <u>J</u> <u>UB</u> <u>TX</u>
	+ Screening ^{2/} <u> </u> = Not Screened TX = TX Level TXV = TXV Level S = S Level
	+ Lead Bending: ^{3/} <u> </u> = Straight UB = Up Bend DB = Down Bend
	+ Package: ^{3/} J = TO-257
	+ Configuration: CT = Common Cathode CA = Common Anode D = Doubler

- Features:**
- PIV: 45Volts
 - Low Reverse Leakage Current
 - Low Forward Voltage Drop
 - Guard Ring for Overload Protection
 - Isolated Hermetically Sealed Package
 - Custom Lead Forming Available
 - Eutectic Die Attach
 - 175°C Operating Temperature
 - Ultrasonic Aluminum Wire Bonds
 - TX, TXV, and S Level Screening Available

Maximum Ratings	Symbol	Value	Units
Peak Repetitive Reverse and DC Blocking Voltage	V_{RRM} V_{RSM} V_R	45	Volts
Average Rectified Forward Current ^{4/} (Resistive Load, 60 Hz Sine Wave, $T_A = 25^\circ C$)	I_O	16	Amps
Peak Surge Current ^{4/} (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ C$)	I_{FSM}	250	Amps
Operating & Storage Temperature	T_{OP} & T_{STG}	-65 to +175	°C
Maximum Thermal Resistance Junction to Case	$R_{\theta JE}$	1.5	°C/W



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

DATA SHEET #: SH0026B

DOC



Solid State Devices, Inc.

14830 Valley View Blvd * La Mirada, Ca 90638
 Phone: (562) 404-7855 * Fax: (562) 404-1773
 ssdi@ssdi-power.com * www.ssdi-power.com

SSR1645CTJ
SSR1645CAJ
SSR1645DJ

Electrical Characteristic ^{5/}		Symbol	Min	Max	Units
Instantaneous Forward Voltage Drop (T _A = 25°C, 300µsec Pulse)	I _F = 5A	V _{F1}	—	0.54	V _{DC}
	I _F = 10A	V _{F2}	—	0.64	
	I _F = 16A	V _{F3}	—	0.76	
Instantaneous Forward Voltage Drop (T _A = -55°C, 300µsec Pulse)	I _F = 10A	V _{F4}	—	0.72	V _{DC}
Reverse Leakage Current (V _R = 45V, 300µs pulse min.)	T _A = 25°C	I _{R1}	—	200	µA
	T _C = 100°C	I _{R2}	—	15	mA
Junction Capacitance (V _R = 10V _{DC} , T _A = 25°C, f = 1MHz)		C _J	—	800	pF

NOTES:

1/ For Ordering Information, Price, and Availability Contact Factory.

2/ Screening per MIL-PRF-19500.

3/ For Package Outlines Contact Factory.

4/ Maximum Electrical Rating Shown for Centertap Configurations both Legs Tied Together.
 For Doubler Configurations: I_O = 15A, I_{FSM} = 250A.

5/ All Electrical Characteristics per Leg @ 25°C, Unless Otherwise Specified.

Available Part Numbers:	PIN ASSIGNMENT			
SSR1645CTJ SSR1645CTJUB SSR1645CTJDB	CONFIGURATION	Pin 1	Pin 2	Pin 3
SSR1645CAJ SSR1645CAJUB SSR1645CAJDB	Common Cathode (CT)	Anode	Cathode	Anode
SSR1645DJ SSR1645DJUB SSR1645DJDB	Common Anode (CA)	Cathode	Anode	Cathode
	Doubler (D)	Cathode	AC	Anode

