



Solid State Devices, Inc.

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**SSR1645CTJ
 SSR1645CAJ
 SSR1645DJ**

**16A 45 V
 SCHOTTKY
 RECTIFIER**

DESIGNER'S DATA SHEET

Part Number / Ordering Information^{1/}

SSR1645 CT J UB TX

+ **Screening**^{2/} = Not Screened
 TX = TX Level
 TXV = TXV Level
 S = S Level

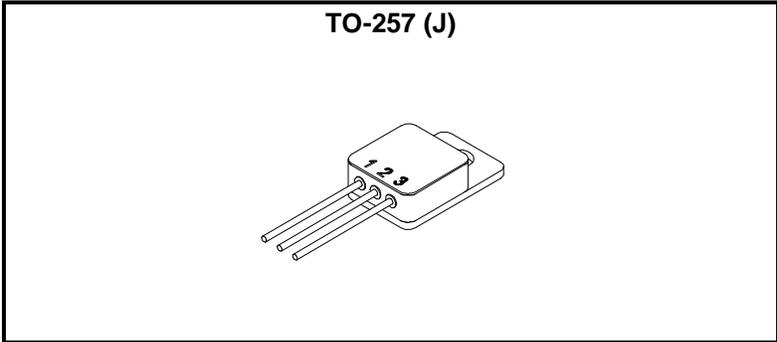
+ **Lead Bending:**^{3/}
 = Straight
 UB = Up Bend
 DB = Down Bend

+ **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. SC'D's for these devices should be reviewed by SSDI prior to release.

DATA SHEET #: SH0026B

DOC



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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

