

Features

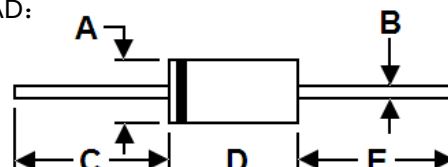
- * Patented Trench Schottky technology
- * Excellent high temperature stability
- * Low forward voltage
- * Low power loss/ high efficiency
- * High forward surge capability
- * Ideal for automated placement



RoHS
COMPLIANT

Package Outline Dimensions

DO-201AD:



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	4.8	5.3	0.189	0.209
B	1.2	1.3	0.047	0.051
C	25.4	-	1.0	-
D	7.2	9.6	0.283	0.378
E	25.4	-	1.0	-

Mechanical Data

- * Case: DO-201AD Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- * Polarity: Color band denotes cathode end

Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Type Number	Symbols	SP1040	SP1045	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	45	V
Maximum RMS Voltage	V_{RMS}	28	31	V
Maximum D.C Blocking Voltage	V_{DC}	40	45	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	10.0		A
Peak Forward Surge Current, 8.3ms single half sine-wave	I_{FSM}	270		A
Maximum Instantaneous Forward Voltage at 10.0A(Note1)	V_F	0.45		V
Maximum D.C Reverse Current @ $T_J=25^{\circ}C$ at Rated D.C Blocking Voltage @ $T_J=100^{\circ}C$	I_R	0.15 20		mA
Typical Thermal Resistance	$R_{\theta JC}$ $R_{\theta JA}$	10 30		$^{\circ}C/W$
Junction Temperature Range - in DC Forward Mode	T_J	-55 to +150		$^{\circ}C$
Storage Temperature Range	T_{STG}	-55 to +150		$^{\circ}C$

Note: 1、Pulse test: $t_p=300\mu S$, 1% duty cycle

Ratings and Characteristic Curves

FIG.1 FORWARD CURRENT DERATING CURVE

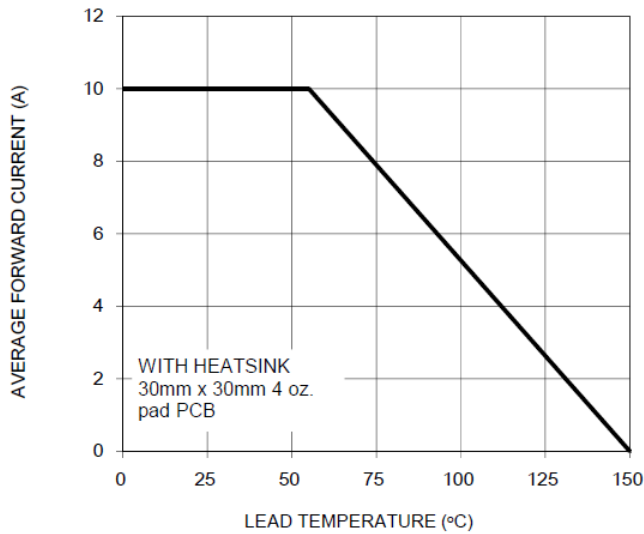


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

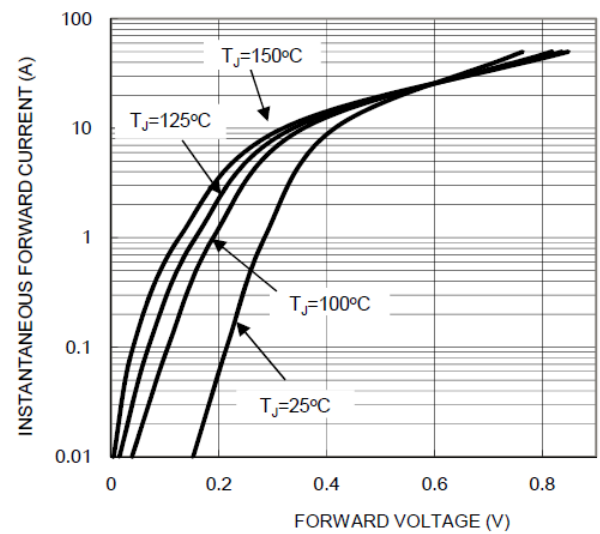


FIG. 3 TYPICAL REVERSE CHARACTERISTICS

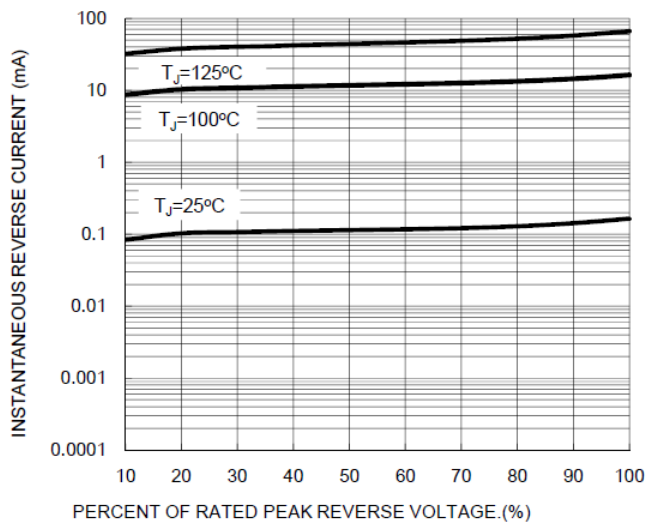


FIG. 4 TYPICAL JUNCTION CAPACITANCE

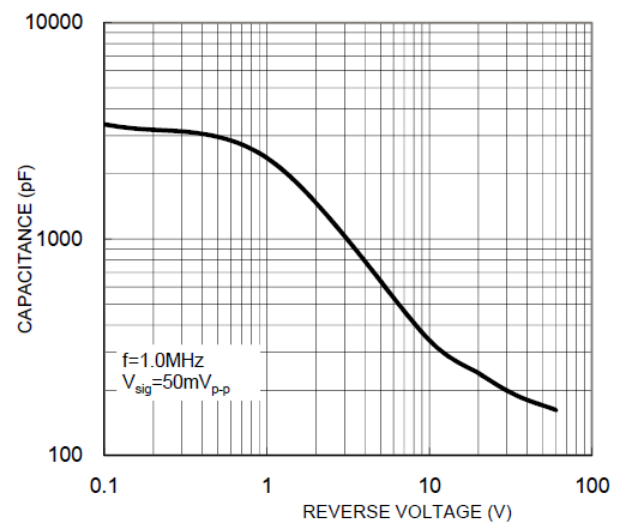
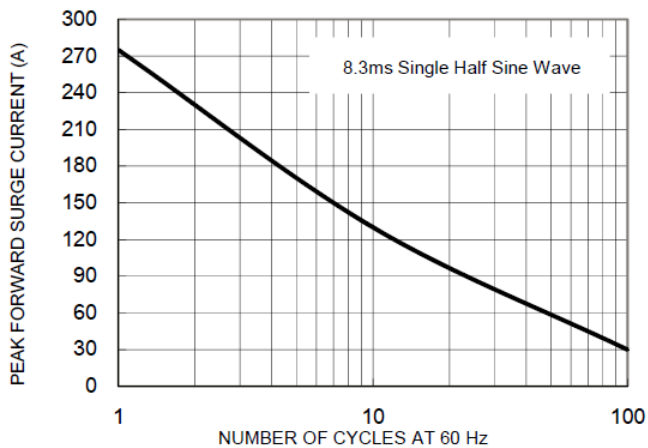


FIG. 5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT





SP1040/SP1045
10 Amps Low VF Trench Schottky Barrier Rectifiers

Ordering Information

Part No.	Package	Packing
SP1040/SP1045	DO-201AD	1.2K/AMMO box
SP1040/SP1045	DO-201AD	1.2K/13" Paper reel
SP1040/SP1045	DO-201AD	0.5K/Bulk packing