SR202S THRU SR220S

2.0 Amps. Schottky Barrier Rectifiers

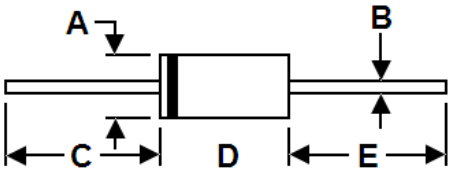
Features

* Low Forward Voltage Drop
* Low power loss, high efficiency
* Guardring for overvoltage protection
* High Surge Current Capability

RoHS COMPLIANT

Package Outline Dimensions

DO-41：



DIM.	Unit（mm）		Unit（inch）	
	Min	Max	Min	Max
A	2.0	2.7	0.078	0.107
B	0.7	0.9	0.027	0.035
C	25.4	-	1.0	-
D	4.2	5.2	0.165	0.205
E	25.4	-	1.0	-

Mechanical Data

* Case: DO-204AC 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 ℃ 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	SR 202S	SR 203S	SR 204S	SR 205S	SR 206S	SR 208S	SR 210S	SR 215S	SR 220S	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	V
Maximum D.C Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	2.0									A
Peak Forward Surge Current, 8.3ms single half sine-wave	I_{FSM}	60									A
Maximum Instantaneous Forward Voltage at 2.0A(Note1)	V_F	0.55			0.70		0.85		0.95		V
Maximum Reverse Current @ Rated VR T_J=25℃	I_R	0.5					0.1				mA
T_J=100℃		10			5		-				
T_J=125℃		-			-		2				
Voltage Rate of Change (Rated VR)	dV/dt	10000									V/μs
Typical Thermal Resistance	$R_{\theta JC}$ $R_{\theta JL}$ $R_{\theta JA}$	14 21.7 75									℃/W
Operating Junction Temperature Range	T_J	-55 to +125			-55 to +150						℃
Storage Temperature Range	T_{STG}	-55 to +150									℃

Note: 1、Pulse test: tp=300μS, 1% duty cycle

Ratings and Characteristic Curves

FIG.1- FORWARD CURRENT DERATING CURVE

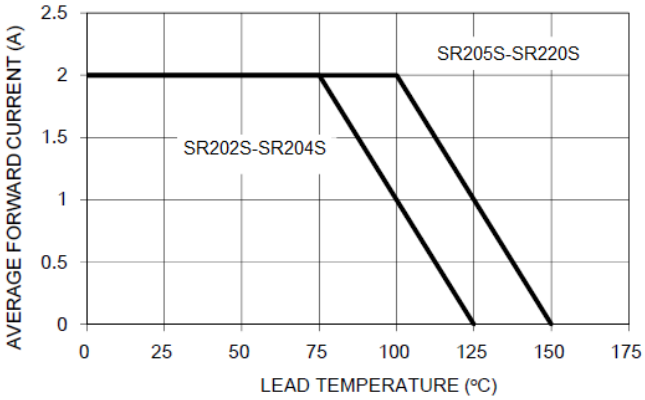


FIG. 2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

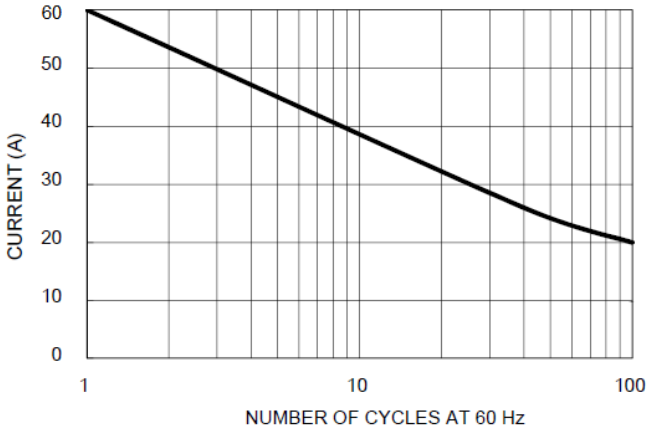


FIG. 3- TYPICAL FORWARD CHARACTERISTICS

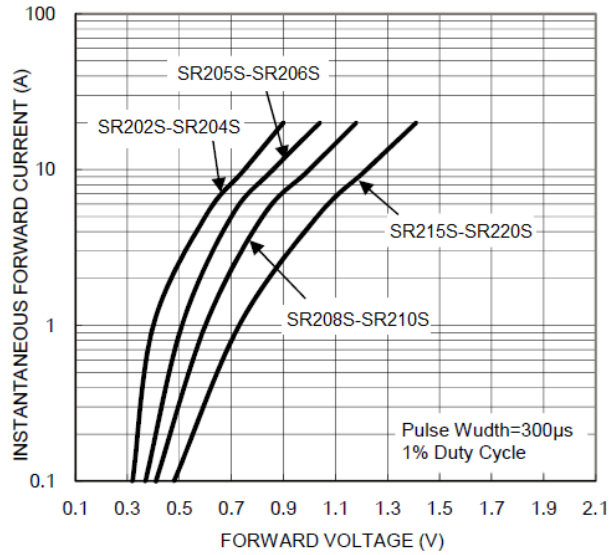


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

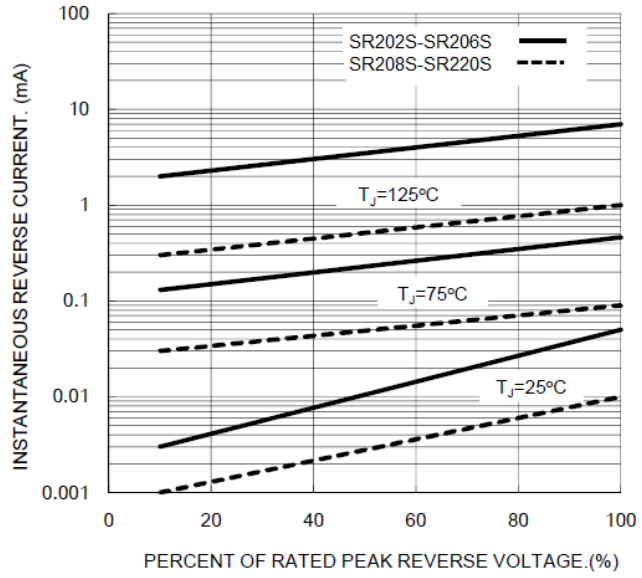


FIG. 5- TYPICAL JUNCTION CAPACITANCE

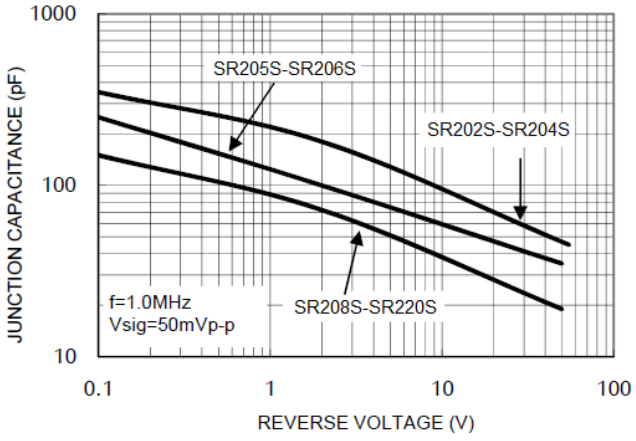
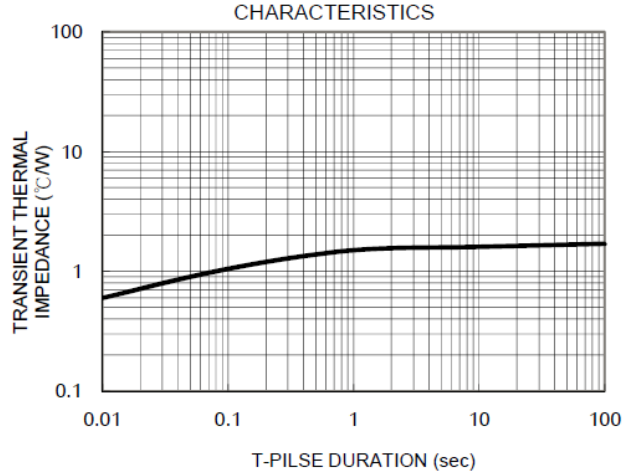


FIG. 6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS



Ordering Information

Part No.	Package	Packing
SR202S~SR220S	DO-41	3K/AMMO box
SR202S~SR220S	DO-41	5K/AMMO box
SR202S~SR220S	DO-41	5K/13" Paper reel
SR202S~SR220S	DO-41	1K/Bulk packing