

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

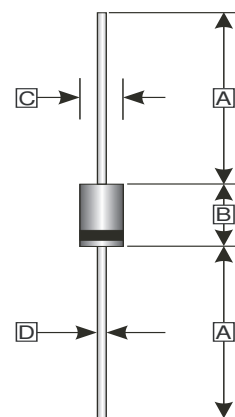
FEATURES

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction

MECHANICAL DATA

- Case: 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
- Mounting position: Any
- Weight: 1.10 grams (approximately)

DO-27



REF.	Millimeter	
	Min.	Max.
A	25.4 (TYP)	
B	7.20	9.53
C	4.80	5.60
D	1.10	1.32

ORDER INFORMATION

Part Number	Type
SR520~SR560	Lead (Pb)-free
SR520-C~SR560-C	Lead (Pb)-free and Halogen-free

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Parameters	Symbol	Part Number				Unit
		SR520	SR530	SR540	SR560	
Recurrent Peak Reverse Voltage	V_{RRM}	20	30	45	60	V
Working Peak Reverse Voltage	V_{RWM}	20	30	45	60	V
DC Blocking Voltage	V_{DC}	20	30	45	60	V
Average Forward Rectified Current ¹	I_F	5				A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	100				A
Instantaneous Forward Voltage @5A	V_F	0.52		0.65		V
Maximum DC Reverse Current at Rated DC Blocking Voltage ²	$T_A=25^{\circ}C$	0.5				mA
	$T_A=100^{\circ}C$	20				
Typical Junction Capacitance ¹	C_J	380				pF
Typical Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	28				°C/W
Typical Thermal Resistance from Junction to Case	$R_{\theta JC}$	12				°C/W
Typical Thermal Resistance from Junction to Lead	$R_{\theta JL}$	15				°C/W
Operating & Storage Temperature	T_J, T_{STG}	-50~150, -65~175				°C

Notes:

1. Measured at 1 MHz and applied reverse voltage of 4.0V D.C
2. Pulse test: 300us pulse width, 1% duty cycle.

RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

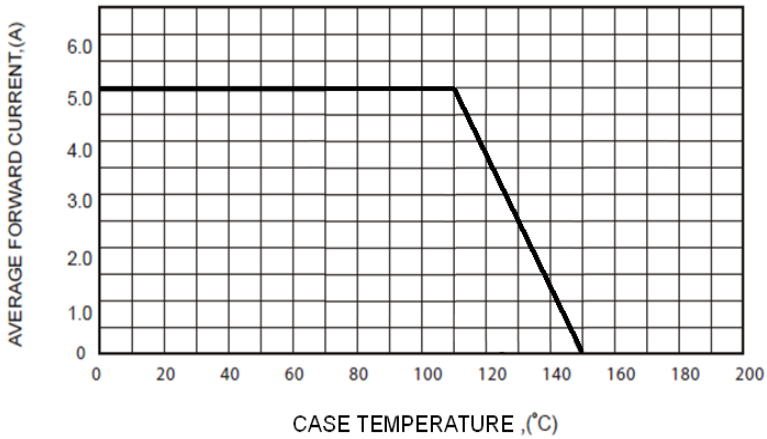


FIG.2-TYPICAL FORWARD CHARACTERISTICS

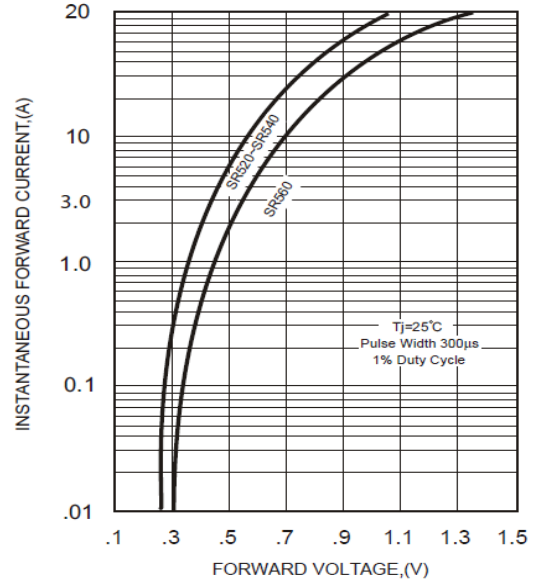


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

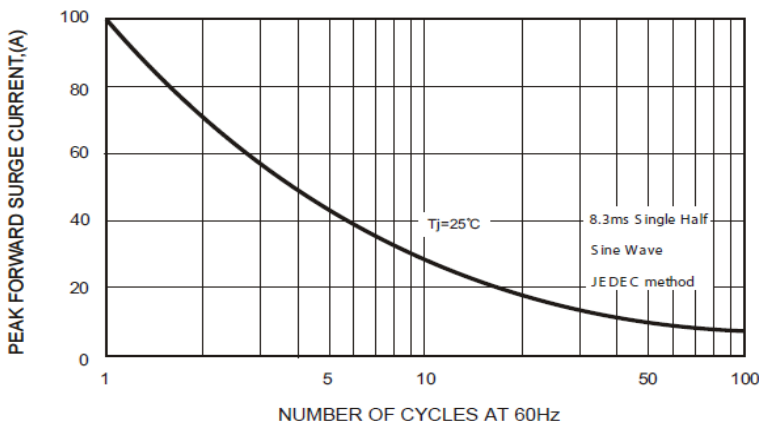


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

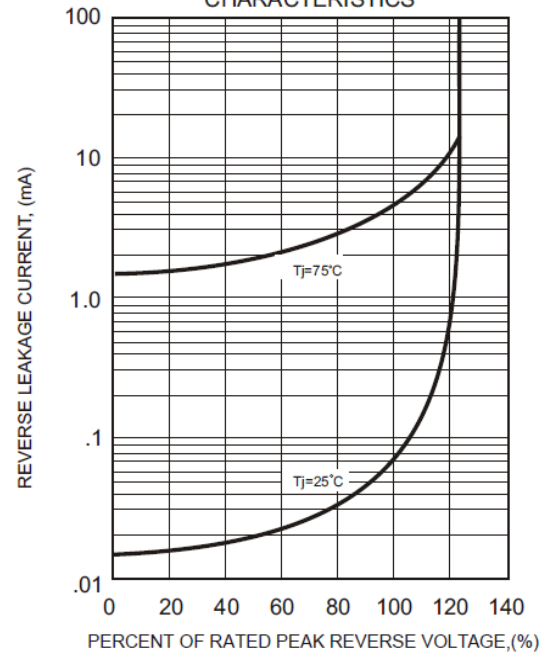


FIG.4-TYPICAL JUNCTION CAPACITANCE

