Low forward voltage Schottky Barrier Rectifier

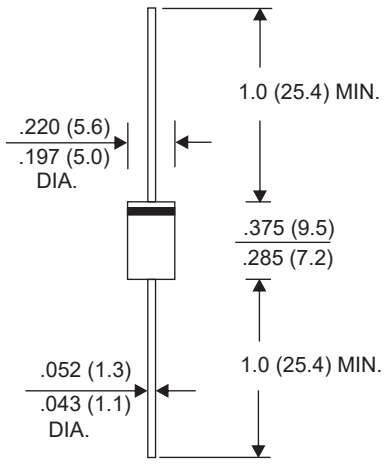
SR540L 5A 40 V

RoHS COMPLIANT

Features And Mechanical Data

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for over voltage protection
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop High
- surge capability
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering:260℃ MAX at 10 seconds, per JESD 22-B106 or MIL-STD-750,method 2026
- Case: JEDEC DO-27(DO-201AD) molded plastic body

DO-27(DO-201AD)



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified. Single phase, half wave, 60HZ, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.1	I_O			5.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}			120	A
Reverse current	$V_R = V_{RRM}$ $T_A = 25^oC$	I_R			0.5	mA
	$V_R = V_{RRM}$ $T_A = 100^oC$				20	
Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage	C_J		380		pF
Thermal resistance	Junction to case	$R_{\theta JC}$		27		$^oC/W$
Storage temperature		T_{STG}	-55		+150	^oC

Symbol	Marking code	Max. repetitive peak reverse voltage V_{RRM} (V)	Max. RMS voltage V_{RMS} (V)	Max. DC blocking voltage V_R (V)	Max. forward voltage @5A, $T_A = 25^oC$ V_F (V)	Operating temperature T_J (^oC)
SR540	SR540L(M)	40	28	40	0.43	-50 ~ +150

Low forward voltage Schottky Barrier Rectifier

SR540L 5A 40 V

RoHS COMPLIANT

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

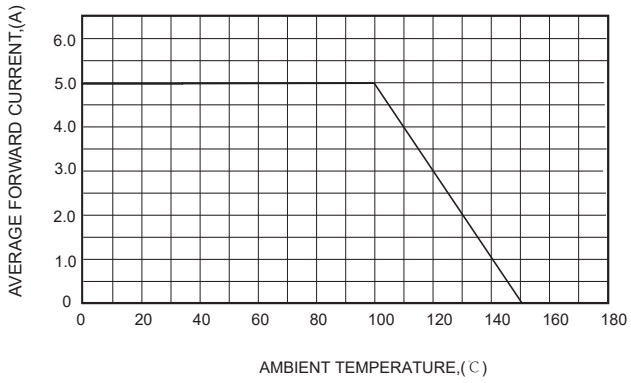


FIG.2-TYPICAL FORWARD CHARACTERISTICS

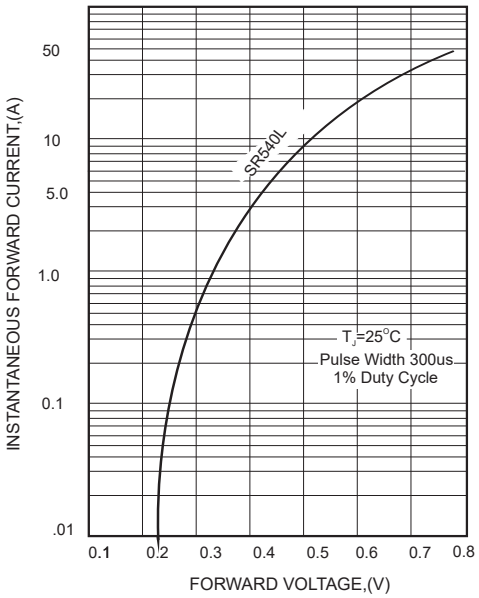


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

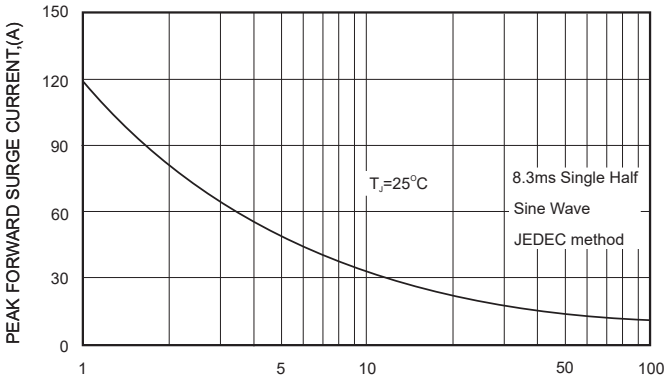


FIG.4-TYPICAL JUNCTION CAPACITANCE

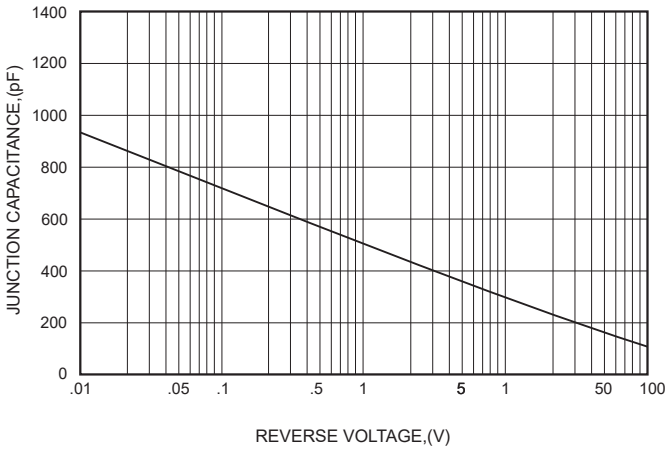


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

