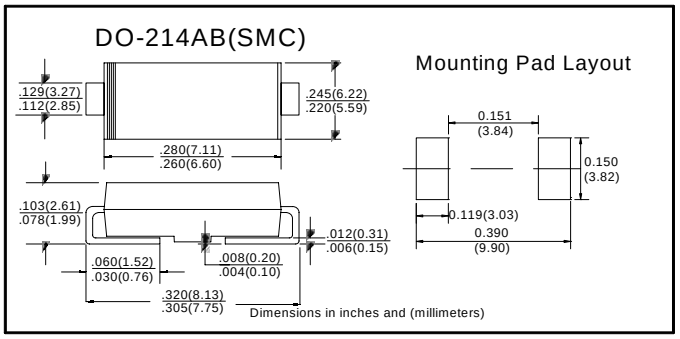
Schottky Rectifier

■ Features

- I_o 5.0A
- V_{RRM} 20V-200V
- High surge current capability

✧ UL Recognized File # E-326243
✧ For surface mounted application
✧ Metal to sillicon rectifier, majority carrier conduction
✧ Low forward voltage drop
✧ Easy pick and place
✧ High surge current capability
✧ Plastic material used carriers Underwriters Laboratory Classification 94V-0
✧ Epitaxial construction
✧ High temperature soldering : 260℃/10 seconds at terminals

■ Outline Dimensions and Mark



■ Applications

- Rectifier

■ Mechanical Data

✧ Case: Molded plastic
✧ Terminals: Pure tin plated, lead free
✧ Polarity: Indicated by cathode band
✧ Packaging: 16mm tape per EIA Std RS-481
✧ Weight: 0.21 gram

■ 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	Symbol	SS 52	SS 53	SS 54	SS 55	SS 56	SS 59	SS 510	SS 515	SS 520	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	90	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	63	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	90	100	150	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	5									A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	120									A
Maximum Instantaneous Forward Voltage (Note 1) @ 5 A	V_F	0.55			0.75		0.85		0.95		V
Maximum Reverse Current @ Rated VR T_A=25 ℃	I_R	0.5					0.3				mA
T_A=100 ℃		20			10		-				
T_A=125 ℃		-					5				
Typical Thermal Resistance	$R_{\theta jL}$ $R_{\theta jA}$	17 50									^{O}C/W
Operating Temperature Range	T_J	- 55 to + 150									^{O}C
Storage Temperature Range	T_{STG}	- 55 to + 150									^{O}C

Note 1: Pluse Test with PW=300 usec, 1% Duty Cycle

■ Characteristics(Typical)

FIG.1 FORWARD CURRENT DERATING CURVE

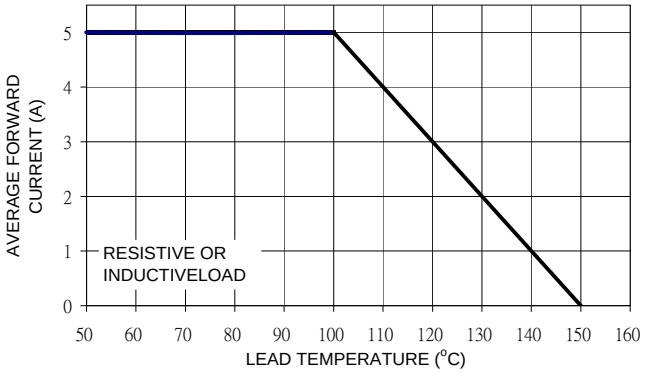


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

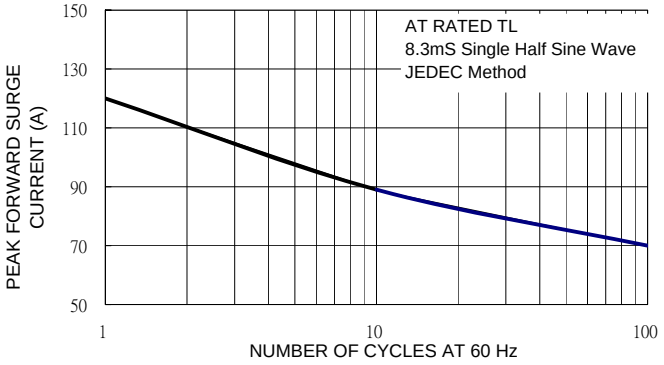


FIG. 3 TYPICAL FORWARD CHARACTERISRICS

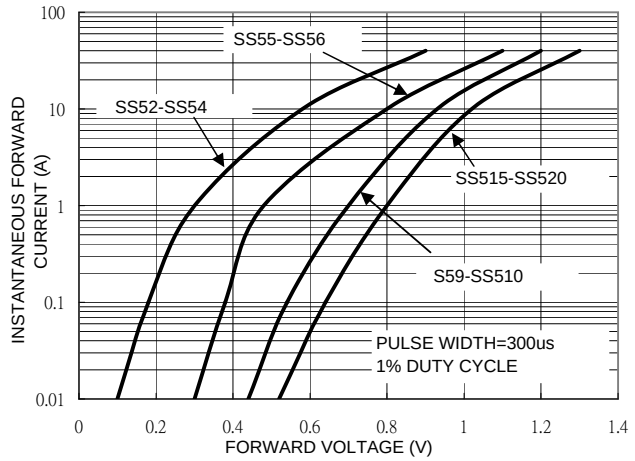


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

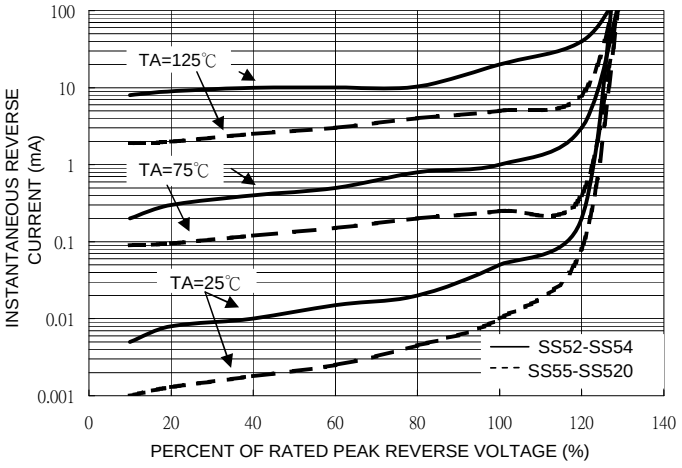


FIG. 5 TYPICAL JUNCTION CAPACITANCE

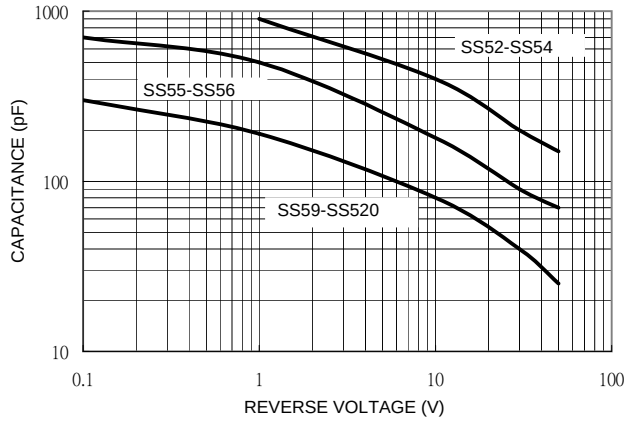


FIG. 6 TYPICAL TRANSIENT THERMAL IMPEDANCE