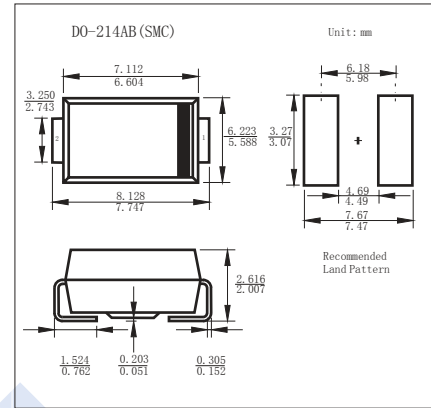


Rectifier Diodes

S3A ~ S3M

■ Features

- Low profile package
- Ideal for automated placement
- Glass passivated chip junction
- Low forward voltage drop
- Low leakage current
- High forward surge capability

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	S3A	S3B	S3D	S3G	S3J	S3K	S3M	Unit
Peak Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	
DC Blocking Voltage	V_R	50	100	200	400	600	800	1000	
Average Rectified Current@ $T_L=103^\circ\text{C}$	I_{FAV}	3							A
Peak Forward Surge Current @ $t=8.3\text{ms}$	I_{FSM}	100							
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	47							$^\circ\text{C}/\text{W}$
Thermal Resistance Junction to Lead	$R_{\theta JC}$	13							
Junction Temperature	T_J	150							$^\circ\text{C}$
Storage Temperature range	T_{stg}	-55 to 150							

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 2.5\text{ A}$			1.15	V
Reverse voltage leakage current	I_R	$T_a = 25^\circ\text{C}$			10	μA
		$T_a = 125^\circ\text{C}$			250	
Junction capacitance	C_j	$V_R = 4\text{ V}, f = 1\text{ MHz}$			60	pF
Typical reverse recovery time	t_{rr}	$I_F = 0.5\text{ V}, I_R = 1\text{ A}, I_{rr} = 0.25\text{ A}$			2.5	μs

■ Marking

NO.	S3A	S3B	S3D	S3G	S3J	S3K	S3M
Marking	S3A	S3B	S3D	S3G	S3J	S3K	S3M

Rectifier Diodes

S3A ~ S3M

Typical Characteristics

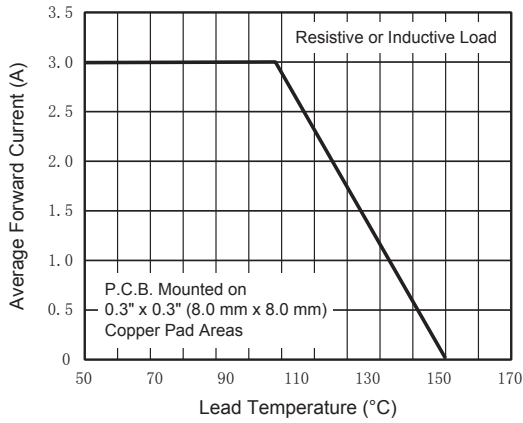


Fig. 1 - Forward Current Derating Curve

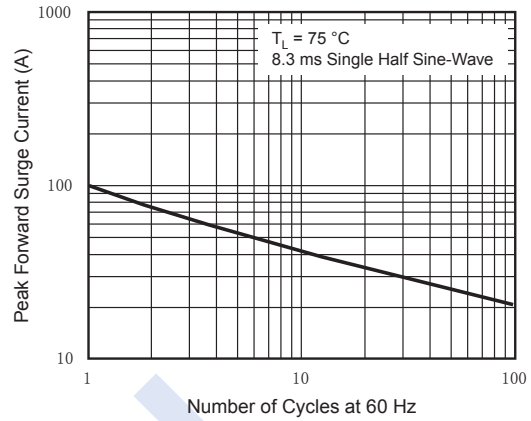


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

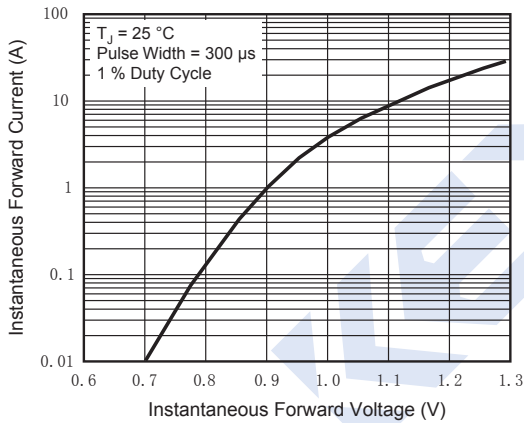


Fig. 3 - Typical Instantaneous Forward Characteristics

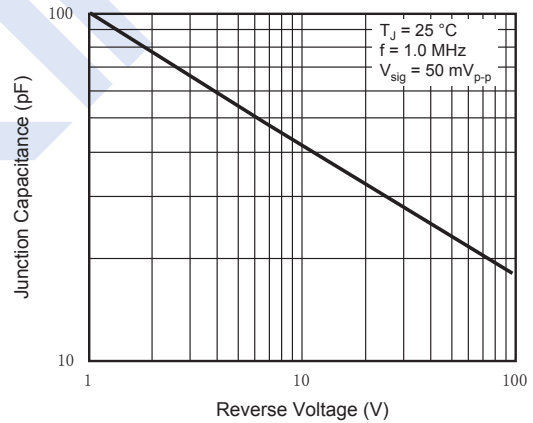


Fig. 5 - Typical Junction Capacitance

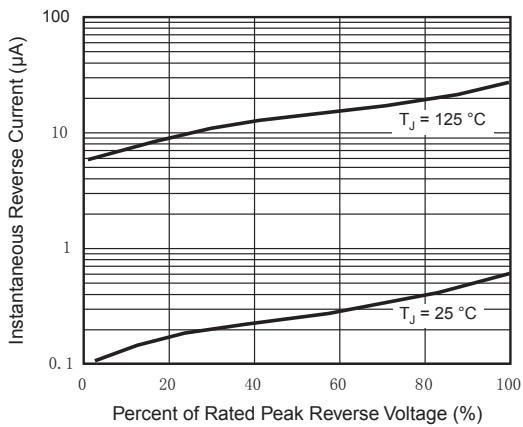


Fig. 4 - Typical Reverse Characteristics

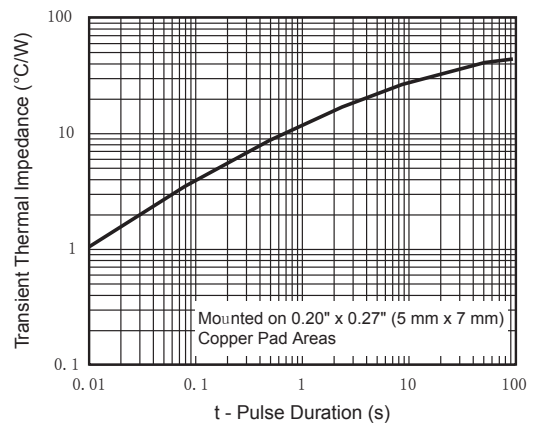


Fig. 6 - Typical Transient Thermal Impedance