

*New Jersey Semi-Conductor Products, Inc.*

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1N645 thru 1N649  
 1N645A

Silicon General Purpose Diode

MAXIMUM RATINGS ( $T_A=25^{\circ}\text{C}$  unless otherwise noted)

	SYMBOL	1N645	1N645A	1N646	1N647	1N648	1N649	UNIT
Peak Working Reverse Voltage	$V_{RWM}$	225	225	300	400	500	600	V
Average Forward Current	$I_O$			400				mA
Average Forward Current ( $T_A=150^{\circ}\text{C}$ )	$I_O$			150				mA
Peak Forward Surge Current	$I_{FSM}$			3.0				A
Power Dissipation	$P_D$			600				mW
Operating and Storage Junction Temperature	$T_J, T_{stg}$			-65 TO +175				$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ( $T_A=25^{\circ}\text{C}$  unless otherwise noted)

SYMBOL	TEST CONDITIONS	1N645		1N645A		1N646		1N647		1N648		1N649		UNIT
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	
$I_R$	$V_R=V_{RWM}$		0.2		0.2		0.2		0.2		0.2		0.2	$\mu\text{A}$
$I_R$	$V_R=V_{RWM}, T_A=100^{\circ}\text{C}$		15		15		15		20		20		25	$\mu\text{A}$
$I_R$	$V_R=60\text{V}$		-		0.05		-		-		-		-	$\mu\text{A}$
$I_R$	$V_R=60\text{V}, T_A=125^{\circ}\text{C}$		-		10		-		-		-		-	$\mu\text{A}$
$V_F$	$I_F=400\text{mA}$		1.0		1.0		1.0		1.0		1.0		1.0	V
CT	$V_R=12\text{V}, f=1.0\text{MHz}$	5.0 TYP		5.0 TYP		5.0 TYP		5.0 TYP		5.0 TYP		5.0 TYP		pF



Quality Semi-Conductors

