This series of high power, high voltage PIN and NIP diodes incorporates passivated mesa technology. A broad range is available, in terms of breakdown voltages, junction capacitances, and series resistances, to suit a large variety of applications, from 1 MHz to several GHz.

High voltage PIN and NIP diodes

CHIP DIODES				CHIP AND PACKAGED DIODES						
CHARACTERISTICS at 25°C		CHIP DIMENSIONS		APPLICABLE VOLTAGE V_R	BREAK-DOWN VOLTAGE V_{BR}	JUNCTION CAPACITANCE C_j		FORWARD SERIES RESISTANCE R_{SF}		MINORITY CARRIER LIFETIME τ_i
TEST CONDITIONS		N/A		I<10 µA	I<10 µA	V_R = 50 V f = 1 MHz		f = 120 MHz I_F as shown		I_F = 10 mA I_R = 6 mA
TYPE		mm typ		V	V	pF		Ω max		µs
PIN	NIP	Gold dia	per side	min	typ	typ	max	I_F=100 mA	I_F = 200 mA	min
EH 80050	EH 89050	0.13	0.6	500	550	0.15	0.20	0.70	0.65	1.1
EH 80051	EH 89051	0.15	0.6	500	550	0.30	0.37	0.60	0.55	1.5
EH 80052	EH 89052	0.25	0.8	500	550	0.60	0.70	0.40	0.30	2.0
EH 80053	EH 89053	0.27	0.8	500	550	0.80	0.90	0.30	0.25	2.5
EH 80083	EH 89083	0.27	0.9	800	850	0.80	0.90	0.40	0.30	3.0
EH 80100	EH 89100	0.23	0.8	1000	1100	0.30	0.40	0.70	0.60	3.0
EH 80102	EH 89102	0.30	0.9	1000	1100	0.60	0.75	0.40	0.35	4.0
EH 80106	EH 89106	0.55	1.4	1000	1100	1.40	1.70	0.35	0.30	7.0
						V_R = 100 V		I_F = 200 mA	I_F = 300 mA	
EH 80120	EH 89120	0.25	0.9	1200	1300	0.30	0.40	0.60	0.55	6.0
EH 80124	EH 89124	0.65	1.5	1200	1300	1.00	1.20	0.45	0.35	10.0
EH 80126	EH89126	0.75	1.7 H[1]	1200	1300	1.40	1.70	0.40	0.30	12.0
EH 80129	EH 89129	1.25	2.2	1200	1300	2.00	2.30	0.30	0.25	15.0
EH 80154	EH 89154	0.65	1.5	1500	1600	1.00	1.20	0.45	0.35	10.0
EH 80156	EH 89156	0.75	1.7H[1]	1500	1600	1.40	1.70	0.40	0.30	12.0
EH 80159	EH 89159	1.25	2.2	1500	1600	2.00	2.30	0.30	0.25	15.0
						V_R = 200 V		I_F = 200 mA	I_F = 300 mA	
EH 80182	EH 89182	0.75	1.5	1800	1900	0.60	0.80	0.60	0.50	12.0
EH 80184	EH 89184	0.85	1.7	1800	1900	1.00	1.30	0.50	0.40	14.0
EH 80186	EH 89186	1.00	2.2	1800	1900	1.40	1.70	0.45	0.35	16.0
EH 80189	EH 89189	1.40	2.6H[1]	1800	1900	2.00	2.40	0.35	0.30	18.0
EH 80204	EH 89204	0.85	1.7	2000	2100	1.00	1.30	0.50	0.40	14.0
EH 80206	EH 89206	1.00	2.2	2000	2100	1.40	1.70	0.45	0.35	16.0
EH 80209	EH 89209	1.40	2.6H[1]	2000	2100	2.00	2.40	0.35	0.30	18.0
						V_R = 200 V		I_F = 200 mA	I_F = 500 mA	
N/A	EH 89308	1.65	4.2	3000	3200	1.80	2.20	0.35	0.25	25.0

[1] Hexagonal chips (between opposite flats) ⟨ ⟩ H

PACKAGED DIODES							
TYPE		STANDARD CASES [2]			THERMAL RESISTANCE R_{th}	TYPICAL OPERATING CONDITIONS	
					P_{diss} = 1 W [3]	VSWR ≤ 1.5 Z_0 = 50 Ω STANDARD SHUNT CASE	
					°C/W	FREQUENCY	POWER
PIN	NIP	Shunt	Isolated stud	Flat mounted	max	MHz	W
DH 80050	DH 89050	F 27 d	BH 301	BH 202	20.0	50 - 20000	50
DH 80051	DH 89051	F 27 d	BH 301	BH 202	18.0	30 - 15000	80
DH 80052	DH 89052	F 27 d	BH 301	BH 202	15.0	20 - 10000	100
DH 80053	DH 89053	F 27 d	BH 301	BH 202	12.0	20 - 3000	100
DH 80083	DH 89083	F 27 d	BH 301	BH 202	12.0	20 - 3000	100
DH 80100	DH 89100	F 27 d	BH 301	BH 202	15.0	20 - 10000	80
DH 80102	DH 89102	F 27 d	BH 301	BH 202	12.0	20 - 3000	100
DH 80106	DH 89106	BH 141	BH 300	BH 202	5.5	10 - 500	500
DH 80120	DH 89120	F 27 d	BH 301	BH 202	15.0	10 - 8000	100
DH 80124	DH 89124	BH 141	BH 300	BH 200	8.0	10 - 2000	250
DH 80126	DH 89126	BH 141	BH 300	BH 200	6.0	10 - 500	500
DH 80129	DH 89129	BH 141	BH 300	BH 200	4.5	5 - 200	1000
DH 80154	DH 89154	BH 141	BH 300	BH 200	8.0	10 - 2000	250
DH 80156	DH 89156	BH 141	BH 300	BH 200	6.0	10 - 500	500
DH 80159	DH 89159	BH 141	BH 300	BH 200	4.5	5 - 200	1000
DH 80182	DH 89182	BH 141	BH 300	BH 200	10.0	10 - 1500	150
DH 80184	DH 89184	BH 141	BH 300	BH 200	8.0	10 - 1000	250
DH 80186	DH 89186	BH 141	BH 300	BH 200	6.0	5 - 500	500
DH 80189	DH 89189	BH 141	BH 300	BH 200	4.5	1.5 - 200	1000
DH 80204	DH 89204	BH 141	BH 300	BH 200	8.0	10 - 1000	250
DH 80206	DH 89206	BH 141	BH 300	BH 200	6.0	5 - 500	500
DH 80209	DH 89209	BH 141	BH 300	BH 200	4.5	1.5 - 200	1000
N/A	DH 89308	BH 156	(2)	(2)	4.0	1 - 100	2000

[2] Custom cases on request

[3] R_{th} is measured in standard shunt case, grounded on infinite heatsink.

Temperature Range :
Operating junction(T_j) : -55°C to +175°C
Storage : -65°C to +200°C