

Surface Mount switching and attenuator Silicon PIN diodes

Switch application

Characteristics @ Ta=+25° C

PACKAGED DIODES				
	Breakdown	Total	Series	Minority
	Voltage	capacitance	resistance	Carrier
	Vbr	Ct	Rsf	Lifetime Tl
Tests	IR = 10 μA	F = 1MHz	IF = 10mA	IF = 10mA
conditions		VR = 50V	F = 120MHz	IR = 6mA
Type	V min.	pF max	Ω max	ns typ.
DH50037	30	0,8(1)	1	40
DH50051	35	0.3(2)	2.5(4)	150
DH50058	35	1(1)	0.5	200
DH50053	50	0.35(3)	1.5	200
DH50103	100	0.35	3	500
DH50109	100	1.2	0.6	1000
DH50203	200	0.35	3	500
DH50209	200	1.2	0.6	1000
DH80051	400	0.6	2	2000

(1) VR = 0V

(2) VR = 5V at F = 1MHz

(3) VR = 20V @ F = 1MHz

(4) RSF @ IF = 5mA

Attenuator application

Electrical characteristics @Ta =+25°

PACKAGED DIODES											
Electrical Parameters	I Zone thickness	Forward series resistance Rsf						Total capacitance	Reverse current Ir	Carrier lifetime tI	
		W									
Test	μm	F = 120MHz						F = 1MHz	VR = 100V	IF = 10mA	
conditions								VR = 50V		IR = 6mA	
Type	Typ	If = 0.1mA		If = 1mA		If = 10mA		pF		μA	μs
		min.	max	min.	max	min.	max	min.	max	typ.	typ.
DH40141*	140	300	700	50	100	6.0	12.5	0.25	0.35	10	2.5
DH40144	140	150	400	25	50	3.0	7	0.30	0.55	10	5.0
DH40225	220	300	700	50	100	6.0	12.5	0.30	0.55	10	7.0
DH40226	220	300	650	50	80	6	11	0.30	0.50	10	7.0

* DH40141 - 87: Rs at 100mA < 3Ω

Temperature ranges

Operating junction (Tj): -55°C to +125°C

Storage: -65°C to +1

How to order?

DH50051	-	51	N	T3
Diode type	Package information		Lead Free Option	Tape & Reel
	51: single SOT23 53: dual common cathode SOT23 54: dual common			T1: 1 000 pieces T3: 3 000 pieces T10: 10 000 pieces Blank: bulk