



ELECTRICAL CHARACTERISTICS (T<sub>A</sub> = 25 °C)

Type Number	Breakdown Voltage <sup>Note 1</sup> V <sub>BR</sub> (V)			Dynamic Impedance <sup>Note 2</sup> Z <sub>z</sub> (Ω)		Reverse Leakage I <sub>R</sub> (μA)		Capacitance C <sub>t</sub> (pF)		E.S.D Voltage (kV)	
	MIN.	MAX.	I <sub>T</sub> (mA)	MAX.	I <sub>T</sub> (mA)	MAX.	V <sub>R</sub> (V)	TYP.	TEST CONDITION	MIN.	TEST CONDITION
NNCD3.3E	3.10	3.50	5	130	5	20	1.0	220	V <sub>R</sub> = 0 V f = 1 MHz	30	C = 150 pF R = 330 Ω (IEC1000-4-2)
NNCD3.6E	3.40	3.80	5	130	5	10	1.0	210		30	
NNCD3.9E	3.70	4.10	5	130	5	10	1.0	200		30	
NNCD4.3E	4.01	4.48	5	130	5	10	1.0	180		30	
NNCD4.7E	4.42	4.90	5	130	5	10	1.0	170		30	
NNCD5.1E	4.84	5.37	5	130	5	5	1.5	160		30	
NNCD5.6E	5.31	5.92	5	80	5	5	2.5	140		30	
NNCD6.2E	5.86	6.53	5	50	5	2	3.0	120		30	
NNCD6.8E	6.47	7.14	5	30	5	2	3.5	110		30	
NNCD7.5E	7.06	7.84	5	30	5	2	4.0	90		30	
NNCD8.2E	7.76	8.64	5	30	5	2	5.0	90		30	
NNCD9.1E	8.56	9.55	5	30	5	2	6.0	90		30	
NNCD10E	9.45	10.55	5	30	5	2	7.0	80		30	
NNCD11E	10.44	11.56	5	30	5	2	8.0	70	30		
NNCD12E	11.42	12.60	5	35	5	2	9.0	70	30		

- Notes** 1. Tested with pulse (40 ms)  
 2. Z<sub>z</sub> is measured at I<sub>T</sub> give a small A.C. signal.

TYPICAL CHARACTERISTICS (T<sub>A</sub> = 25 °C)

Fig. 1 POWER DISSIPATION vs. AMBIENT TEMPERATURE

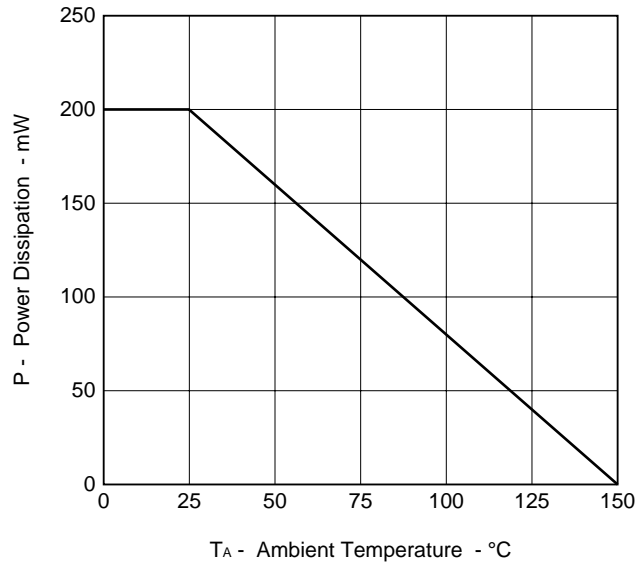


Fig. 2 I<sub>T</sub> - V<sub>BR</sub> CHARACTERISTICS

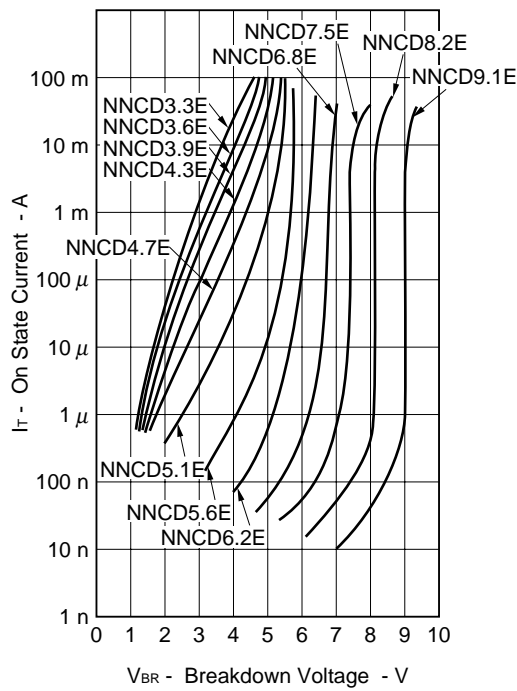


Fig. 3 I<sub>T</sub> - V<sub>BR</sub> CHARACTERISTICS

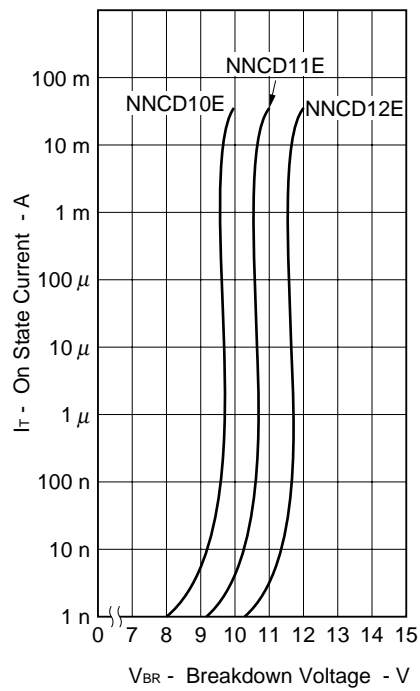


Fig. 4 Z<sub>z</sub> - I<sub>r</sub> CHARACTERISTICS

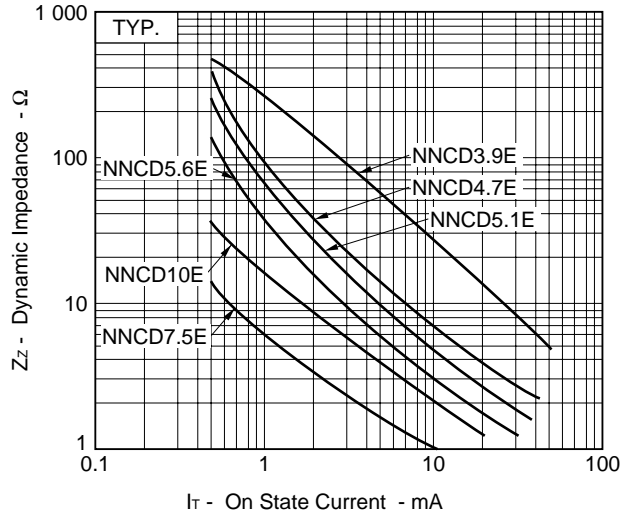


Fig. 5 TRANSIENT THERMAL IMPEDANCE

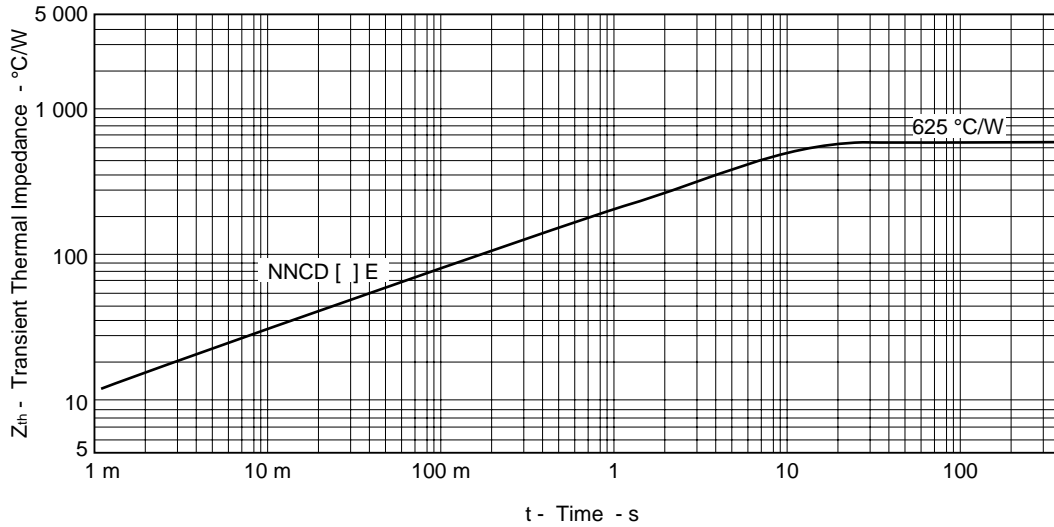
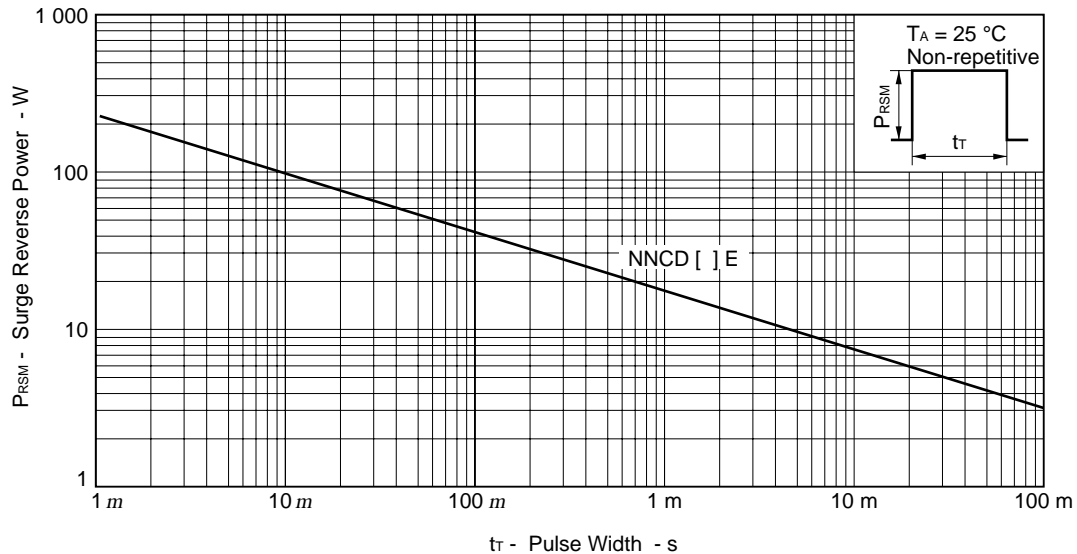
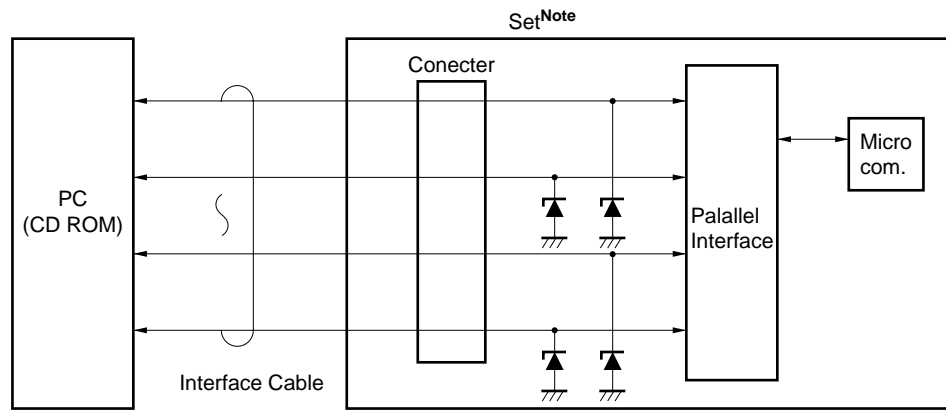


Fig. 6 SURGE REVERSE POWER RATING



Sample Application Circuits



**Note** Set  
Printer, P.D.C, T.V Game etc

**REFERENCE**

Document Name	Document No.
NEC semiconductor device reliability/quality control system	C11745E
NEC semiconductor device reliability/quality control system	MEI-1201
Quality grade on NEC semiconductor device	C11531E
Semiconductor device mounting technology manual	C10535E
Guide to quality assurance for semiconductor device	MEI-1202

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