

PRODUCT RANGE NPO



CLASS	Class I																			
T.C.	NPO																			
TYPE	Standard														HV			Array		
SIZE	0201	0402			0603			0805				1206				1206	1808	1206		
RV	25V	25V	50V	100V	25V	50V	100V	25V	50V	100V	200V	50V	100V	200V	500V	1KV	2KV	3KV	50V	
0.47 p		B	B	B	D	D	D	C	C	C	C									
0.56 p		B	B	B	D	D	D	C	C	C	C									
0.68 p		B	B	B	D	D	D	C	C	C	C									
0.82 p		B	B	B	D	D	D	C	C	C	C									
1.0 p	A	B	B	B	D	D	D	C	C	C	C	D	D	D	D					
1.2 p	A	B	B	B	D	D	D	C	C	C	C	D	D	D	D				D	
1.5 p	A	B	B	B	D	D	D	C	C	C	C	D	D	D	D	D	D		D	
1.8 p	A	B	B	B	D	D	D	C	C	C	C	D	D	D	D	D	D		D	
2.2 p	A	B	B	B	D	D	D	C	C	C	C	D	D	D	D	D	D		D	
2.7 p	A	B	B	B	D	D	D	C	C	C	C	D	D	D	D	D	D		D	
3.3 p	A	B	B	B	D	D	D	C	C	C	C	D	D	D	D	D	D		D	
3.9 p	A	B	B	B	D	D	D	C	C	C	C	D	D	D	D	D	D		D	
4.7 p	A	B	B	B	D	D	D	C	C	C	C	D	D	D	D	D	D		D	
5.6 p	A	B	B	B	D	D	D	C	C	C	C	D	D	D	D	D	D	H	D	
6.8 p	A	B	B	B	D	D	D	C	C	C	C	D	D	D	D	D	D	H	D	
8.2 p	A	B	B	B	D	D	D	C	C	C	C	D	D	D	D	D	D	H	D	
10 p	A	B	B	B	D	D	D	C	C	C	C	D	D	D	D	D	D	H	D	
12 p	A	B	B	B	D	D	D	C	C	C	C	D	D	D	D	D	D	H	D	
15 p	A	B	B	B	D	D	D	C	C	C	C	D	D	D	D	D	D	H	D	
18 p	A	B	B	B	D	D	D	C	C	C	C	D	D	D	D	D	D	H	D	
22 p	A	B	B	B	D	D	D	C	C	C	C	D	D	D	D	D	K	H	D	
27 p	A	B	B	B	D	D	D	C	C	C	C	D	D	D	D	D	K	H	D	
33 p	A	B	B	B	D	D	D	C	C	C	C	D	D	D	D	D	K	H	D	
39 p	A	B	B	B	D	D	D	C	C	C	C	D	D	D	D	D	K	H	D	
47 p	A	B	B	B	D	D	D	C	C	C	C	D	D	D	D	D	K	H	D	
56 p	A	B	B	B	D	D	D	C	C	C	C	D	D	D	D	D	K	H	D	
68 p	A	B	B	B	D	D	D	C	C	C	C	D	D	D	D	D	K	H	D	
82 p	A	B	B	B	D	D	D	C	C	C	C	D	D	D	D	D	K	H	D	
100 p	A	B	B	B	D	D	D	C	C	C	C	D	D	D	D	D	K	H	D	
120 p		B	B	B	D	D	D	C	C	C	C	D	D	D	D	K	K		D	
150 p		B	B		D	D	D	C	C	C	C	D	D	D	D	K	K		D	
180 p		B	B		D	D	D	C	C	C	C	D	D	D	D	K	K		D	
220 p		B	B		D	D	D	C	C	C	C	D	D	D	D	K	K		D	
270 p					D	D	D	C	C	C	C	D	D	D	D	K	K	H	D	
330 p					D	D	D	C	C	C	C	D	D	D	D	K	K	H	D	
390 p					D	D	D	C	C	C	C	D	D	D	D	K	K	H	D	
470 p					D	D	D	C	C	C	C	D	D	D	D	H	H		D	
560 p					D	D	D	C	C	C	C	D	D	D	D	E	E		D	
680 p					D	D	D	C	C	C	C	D	D	D	D	E	E		D	
820 p					D	D		C	C	C	C	D	D	D	E	F			D	
1.0 n					D	D		C	C	C	C	D	D	D	E	F			D	
1.2 n					D	D		E	E	E		C	D	E					D	
1.5 n					D			E	E	E		C	D	F						
1.8 n								E	E	E		C	D							
2.2 n								E	E	E		C	D							
2.7 n								E	E			C	D							
3.3 n								E	E			C	E							
3.9 n								E	E			E	E							
4.7 n								E	E			E	E							
5.6 n								E	E			E								
6.8 n								G	G			F								
8.2 n								G	G			F								
10 n												L								
12 n												L								
15 n																				

NME BME Certain Types may be available in the alternate material. Ask for details

Code	Thickness : (mm)	Code	Thickness : (mm)
A	0.30+/-0.03	F	1.15+/-0.10
B	0.50+/-0.05	G	1.25+/-0.10
C	0.60+/-0.10	H	1.50+/-0.15
D	0.80+/-0.10	K	0.90~1.30
E	0.85+/-0.10	L	1.60+/-0.15

PRODUCT RANGE X7R



CLASS	Class II																										
T.C.	X7R																										
TYPE	Standard																				HV						
SIZE	0402				0603					0805						1206					1206	1808	1812				
RV	10V	16V	25V	50V	10V	16V	25V	50V	100V	10V	16V	25V	50V	100V	200V	10V	16V	25V	50V	100V	200V	500V	1KV	2KV	2KV	2KV	
47 p																											
56 p																											
68 p																											
82 p																											
100 p	B	B	B	B			D	D	D																		
120 p	B	B	B	B			D	D	D																		
150 p	B	B	B	B			D	D	D																		
180 p	B	B	B	B			D	D	D				C	C	C	E					D	D	D	D	E	E	
220 p	B	B	B	B			D	D	D				C	C	C	E					D	D	D	D	E	E	H
270 p	B	B	B	B			D	D	D				C	C	C	E					D	D	D	D	E	E	H
330 p	B	B	B	B			D	D	D				C	C	C	E					D	D	D	D	E	E	H
390 p	B	B	B	B			D	D	D				C	C	C	E					D	D	D	D	E	E	H
470 p	B	B	B	B			D	D	D				C	C	C	E					D	D	D	F	K	K	H
560 p	B	B	B	B			D	D	D				C	C	C	E					D	D	D	F	K	K	H
680 p	B	B	B	B			D	D	D				C	C	C	E					E	E	E	F	K	K	H
820 p	B	B	B	B			D	D	D				C	C	C	E					E	E	E	F	K	H	H
1.0 n	B	B	B	B			D	D	D				C	C	C	E					E	E	E	F	K	H	H
1.2 n	B	B	B	B			D	D	D				C	C	C	E					E	E	E	F	K	H	H
1.5 n	B	B	B	B			D	D	D				C	C	C	E					E	E	E	F	K		H
1.8 n	B	B	B	B			D	D	D				C	C	C	E					E	E	E	F	K		H
2.2 n	B	B	B	B			D	D	D				C	C	C	E					E	E	E	F	K		H
2.7 n	B	B	B	B			D	D	D				C	C	C	E					E	E	E	F	K		H
3.3 n	B	B	B	B			D	D	D				C	C	C	E					E	E	E	F	K		H
3.9 n	B	B	B	B			D	D	D				C	C	C	E					E	E	E	F	K		H
4.7 n	B	B	B	B			D	D	D				C	C	C	E					E	E	E	F	H		H
5.6 n	B	B	B	B			D	D	D				C	C	C	E					E	E	E	F			
6.8 n	B	B	B	B			D	D	D				C	C	C	G					E	E	E	F			
8.2 n	B	B	B				D	D	D				C	C	C	G					E	E	E	F			
10 n	B	B	B				D	D	D				C	C	C						E	E	E	F			
12 n	B	B					D	D	D				C	C	E						E	E	E				
15 n	B	B					D	D	D				C	C	E						E	E	E				
18 n	B	B					D	D	D				C	C	E						E	E	E	F			
22 n	B	B					D	D	D				C	C	E						E	E	E	F			
27 n	B	B					D	D	D				C	C	E						E	E	E	F			
33 n	B	B					D	D	D				C	C	E						E	E	E				
39 n	B	B					D	D	D				C	C	E						E	E	E				
47 n	B	B					D	D	D				C	C	E						E	E	E				
56 n							D	D	D				C	C	E						E	E	E				
68 n							D	D	D				C	C	E						E	E	F				
82 n							D	D	D				E	E							E	E	F				
100 n					D	D							E	E	G						E	F					
120 n					D								E	E	G						E						
150 n					D								E	E	G						E	F					
180 n					D								E	E							E	F					
220 n					D								E	E							E	F					
270 n													E	E							E	E					
330 n													E	E							E	E					
390 n													E	E							E	E					
470 n													E	E							E	E					
560 n													E	E							E	E					
680 n													E	E							E	E					
820 n													E	E							E	E					
1.0 u													E	E							E	F					
1.2 u																					F						
1.5 u																					F						
1.8 u																					L						
2.2 u																					L						

NME

BME

Certain Types may be available in the alternate material. Ask for details

CLASS	ClassII																	
T.C.	X5R			Y5V														
TYPE	Standard			Standard														
SIZE	0402		0603	0402			0603			0805			1206				1210	
RV	10V	16V	10V	10V	16V	25V	16V	25V	50V	16V	25V	50V	10V	16V	25V	50V	16V	
10 n					B	B		D	D						C	C		
12 n	B	B			B	B		D	D						C	C		
15 n	B	B			B	B		D	D						C	C		
18 n	B	B			B	B		D	D						C	C		
22 n	B	B			B	B		D	D						C	C		
27 n	B	B			B			D	D						C	C		
33 n	B	B			B			D	D						C	C		
39 n	B				B			D	D						C	C		
47 n	B				B			D	D			C	C		C	C		
56 n	B				B			D	D			C	C		C	C		
68 n	B				B			D	D			C	C		C	C		
82 n	B				B			D	D			C	C		C	C		
100 n	B			B	B		D	D	D			C	C		C	C		
120 n				B			D					E	E		C	C		
150 n			D	B			D					E	E	E		C	C	
180 n			D	B			D					E	E	E		C	C	
220 n			D	B			D				C	E	E		C	C		
270 n			D				D				C	E			C	C		
330 n			D				D				E	G			C	C		
390 n			D				D				E	G			C	C		
470 n			D				D				E	G			E	E		
560 n							D				E	G			E	E		
680 n							D				E	G			E	E		
820 n							D				G	G			E	E		
1.0 u							D				G	G			E	F	F	
1.2 u											G				E	F		
1.5 u											G				E	F		
1.8 u											G				F	F		
2.2 u											G				F	F		
2.7 u															F	F		
3.3 u															F	L		
3.9 u															L	L		
4.7 u														L	L	L		E
5.6 u														L	L			F
6.8 u														L	L			F
8.2 u														L	L			H
10 u														L				H
12 u																		
15 u																		
18 u																		
22 u																		

NME

BME

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Code	Thickness : (mm)	Code	Thickness : (mm)
A	0.30+/-0.03	F	1.15+/-0.10
B	0.50+/-0.05	G	1.25+/-0.10
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