


	SYMBOL	COMMON DIMENSIONS		
		MIN.	NOR.	MAX.
TOTAL THICKNESS	A	---	---	1.1
STAND OFF	A1	0.16	---	0.26
SUBSTRATE THICKNESS	A2		0.21	REF
MOLD THICKNESS	A3		0.54	REF
BODY SIZE	D		5	BSC
	E		5	BSC
BALL DIAMETER			0.3	
BALL OPENING			0.275	
BALL WIDTH	b	0.27	---	0.37
BALL PITCH	e		0.5	BSC
BALL COUNT	n		50	
EDGE BALL CENTER TO CENTER	D1		4	BSC
	E1		4	BSC
BODY CENTER TO CONTACT BALL	SD		---	BSC
	SE		---	BSC
PACKAGE EDGE TOLERANCE	aaa		0.1	
MOLD FLATNESS	bbb		0.2	
COPLANARITY	ddd		0.08	
BALL OFFSET (PACKAGE)	eee		0.15	
BALL OFFSET (BALL)	fff		0.08	

Notes:
 1. Controlling dimensions in millimeters
 2. Ref: JEDEC MO-195C


DATE: 04/04/13

DESCRIPTION: 50-Ball, Thin Fine Pitch Ball Grid Array, (TFBGA)

PACKAGE CODE: NE50

DOCUMENT CONTROL #: PD - 2158 **REVISION: -**