Ceramic surface mount devices and hermetic metal packages

9

LCC



LCC2



LCC3



Medium-power LCC



TO63



TOILL

LCC2 products

The following LCC2-packaged devices have been specifically designed to accommodate dual

transistors and diodes. The package is qualified to the same specifications as its smaller LCC1 counterpart.

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21	1222	2A	DCS	M	
21	122	20	CS.		
21	V236	9A	DCS	M	
21	124	30	CS		
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Semelab number
INTRODUCTAL
2N2639DCSM
2N3640DCSH
2N264IDCSM
INDEADCEM
2N2643DCSM
INVAHADESM
2N2894DCSM
DVZPOLADICSM
2N2907ADCSM
INZ9I3DČSM

Seme	lab number
21120	40071
2N291	ISDCSM
29429	6DCSM
2N291	17DCSM
23429	STOCK
2N291	19DCSM
214297	YOOCSM
2N297	79DCSM
2M320	POCSM
2N325	SODCSM
214334	MOCSM :

Semelab numb	er
2143344050364	
2N3349DCSM	
2N3350DCSP1	
2N3351DCSM	
2603505054	
2N3410DCSM	
2PERMODERM	
2N3700DCSM	
21-03807 D.C.S.M	
2N3808DCSM	
24GB090CS14	.

Semelab number
2N00100CSN
2N3811ADCSM
24(36) IDC5M
2N3904DCSM
2049370CM
2N4938DCSM
BFX80DCSM
BFX81DCSM
BEXBLOCSM
BFY82DCSM
BFYBADCSM

LCC3 products

This package was introduced to use the same die types and to meet the same specifications as LCC1. The LCC3 serves as an alternative for applications where a larger size is an advantage. Since the package has 4 pins, Semelab also manufactures high reliability matched diode pairs in the LCC3 package.

Medium-power LCC packages

This package is used for small to medium power products, including MOSFETs, bipolar transistors and 3-terminal voltage regulators.

Multi-chip LCC packages

The LCC 18 and larger packages are used for custom arrays of small signal transistors, mainly for high quality systems. Their key benefits include small size and low weight, with full qualification and screening to the highest specification. In multi-chip arrays, quality and performance is also enhanced by the reduction in number and length of interconnects. As with all Semelab products, the LCC16 and LCC18 are suitable for full space-flight applications

Metal case products - opposite

Semelab manufactures metal cased products for all high-reliability and military applications.

Our commitment to maintaining supplies means that even our earliest products are generally still available. We continue to build products in many obsolescent packages, such as SOT9, TO3, TO5 (38mm leads), TO8, TO18, TO39, TO46, TO53, TO59, TO61, TO63, TO66, TO72, TO77, TO83, TO111. For new designs, we recommend TO3, TO18 and TO39 and TO220 (metal), TO254, TO257, and TO258. Screening to all standards and customer specifications is available for all metal case products.

TO220 metal/TO257 packages - opposite

We offer two Semelab versions of the TO220 metal product - with the same dimensions as the popular TO220 plastic device: the TO220 metal with 1mm leads, suitable for high current devices, and the TO257, which has 0.75mm leads and larger glass or ceramic seals, suitable for lower current applications and three terminal voltage regulator ICs.

All products are available screened to any Military specification. Space qualified products are also available. The 2N2880 has been used as a basis for Semelab's ESA approval (TO220metal type) whilst TO257 devices with ceramic seals are used in other space systems.

Military-Aerospace Division hermetic metal packages

Semelab number
2NS153-220M
2N5154-220M
2N5416-220M
2N6661-220M 2N708
2N708
2N7081-220M 2N7086
BDS10
BDS12
BDS13 ()
BDS14
BDS16
BDS18
BDS19 BDS20
BOSI
BFD10
BFD14
BULS8A-SM BUX77A-220M
BLX78A-220M
BYT08-400-220M
BYV143-35AM
BYV143-35M
BYVI43-3SRM BYVI43-40AM
BYV143.40M
BYVI43-40RM
BYV143-45M
BYV29-400M
BYV29-500M
BYV32-150M
BYV32-200M
BYV34-300M
BYV34-400M BYV34-500AM
BYV34-500M

Semelab number
IPI I7AHVG IPI I7AHVIG
IPI I7AIG
IP117G
IPI 17HVG IPI 17HVIG
IP1171G
IP120AG-05 IP120AG-12
IP120AG-15
IP120G-05 IP120G-12
IP120G-15
IP123AG-05
IP123AG-15
IP123G-15 IP137AG
IPI37AHVG
IPI37AHVIG IPI37AIG
IP137G
PI37HVG
IPI37HVIG IPI37IG
IPI37MAIG
IP140AG-05 IP140AG-12
IP140AG-15
IP140AIG-05 IP140G-05
IP140G-12
IP140G-15 IP150AG
IPISOAIG
IPI 50G
IPIR07AG
PIRO7G IPIR17G-05
PIRI7G-12
IPIRI7G-15 IP317AG
IP317G
P3171G
IP7805AG IP7805AIG
IP7805G
IP7805IG IP7812AG

Semelab number
IP7812AIG
IP7812G
IP7812IG IP7815AG
IP7815AIG
IP7815G
IP7905AG IP7905AIG
IP7905G
IP7905IG IP7912AG
IP7912AIG
IP7912G
IP7915AIG
IP7915G
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IRFY130
IRFY132
IRFY133
IRFY220
IRFY221 IRFY222
IRFY223
IRFY230 IRFY231
IRFY232
IRFY233 IRFY240
IRFY240 IRFY320
IRFY321
IRFY322
IRFY330
IRFY331
IRFY333
IRFY340 IRFY420
IRFY421
IRFY422 IRFY423
IRFY430

Semelab number
IRFY431 IRFY432
IRFY433
IRFY440 IRFY510
IRFY511
IRFY513
IRFY520 IRFY521
IRFY522 IRFY523
IR-7530 IRFY531
IRFY532
IRFY533 IRFY610
IRFY611 IRFY612
IRFY613
IRFY620
IRFY622 IRFY623
IRFY630
IRFY632
IRFY633
IRFY711 IRFY712
IRFY713
IRFY721
IRFY722 IRFY723
IRFY730 IRFY731
IRFY732 IRFY733
IRFY820
IRFY821 IRFY822
IRFY823 IRFY830
IRFY831
IRFY832 IRFY833
IRFY9130

Semela	ւb num	ber
LM117A	LIVETON	AKO.
LM117F		
LM1174		
LM137-		LANGERSSON For one A
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LM1376		
LM338-		
LM7805		
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LM7808		
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LM7815		riin.
LM7824		ACTIVATION OF
LM7905	-220M	- 17
LM7908		ne náchlitoná sz
LM7912		
LM7915		
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LT1086		M
LT1086	-220M	VII.2000-1-10
SB10-10		
SB10-10		
SB10-10 SB10-15	C 60000 - 111111 - 11111 - 11111 - 11111	
SB10-15		
SB16-10		SAISK SIGNESSON IN
SB16-10	MOX	
SB16-10		hviji Wolande (va
SB16-45 SB16-45		100
5816-45		
SB30-10		
SB30-10	ORM -	KO TUŠU
SB30-45		
SML100		
SML100	4RGN	nva 💮
SML406		
SML408		
SML458		
SML501		
SML508 SML601		
SML601		
SML802	R4GN	
SML802		removementilli



TO258



TO254



TO257 (G)



TO220M (TO257AB)

TO254/TO258 packages

These are larger versions of the TO220 metal

Semelab number

BDS28A
BDS28B
BDS29C
BDS29A
BDS29B
BDS29C
BFC51M
BFD20
BFD22
BFD24
BFD24
BFD24

Semelab number	
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BFD30	
BFD32	
IPI3BAQ	
SML01N07	
SML1002R4CN	
SML1002RCN	
SML1004R2CN	
SML1004RCN	
SML4030CN	
SML4040CN	
SML4065CN	
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Semelab number
SML4080CN
SML501R1CN
SML5040CN
SML5050CN
SML5085CN
SML601R3CN
SML6060CN
SML6070CN
SML801R2CN
SML801R4CN
SML802R4CN

and TO257 packages. The same level of

qualification is also available for these types.

Semelab numbe					r	
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-	SML	5020	HN			
100m	SML	5025	HN	QEN.		
ı	SML	5025	HN-	·B		
	SML	5030	HN			
ı	SML	6040	ΗN			
	SML	6045	HN			
ı	SML	8075	HN			
	SML	B090	HN			

All TO220 metal and TO257 products have glass seals as standard. Ceramic bead seals are available as an option.

Bipolar, MOSFET, Power Diodes and Linear products are all available in the above packages.