

Rev.C Jul.-2024

TO-252 Voltage Regulator in a TO-252 Plastic Package.

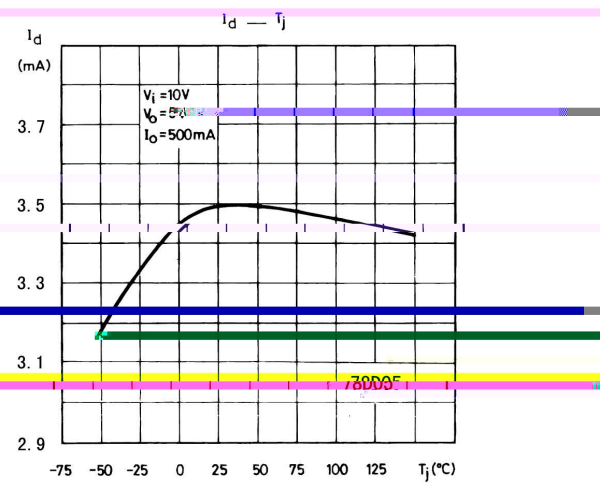
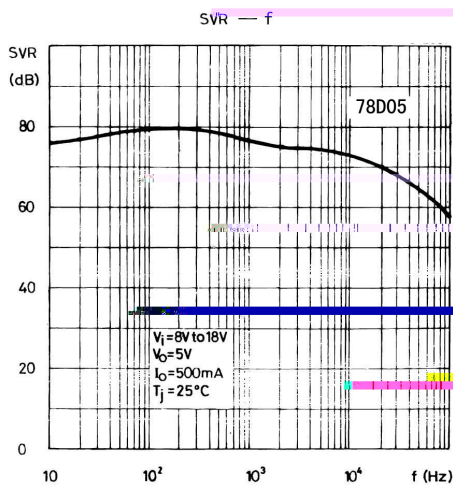
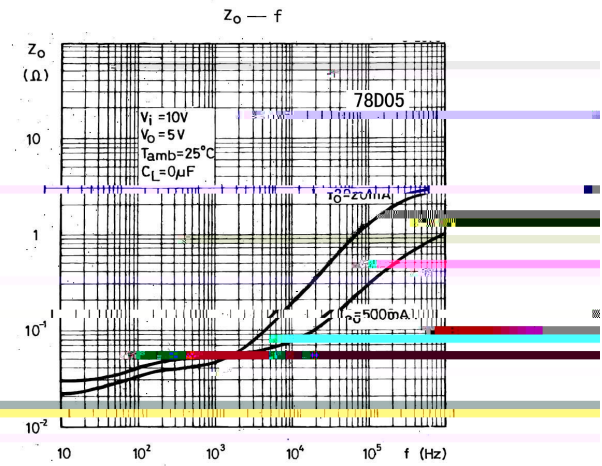
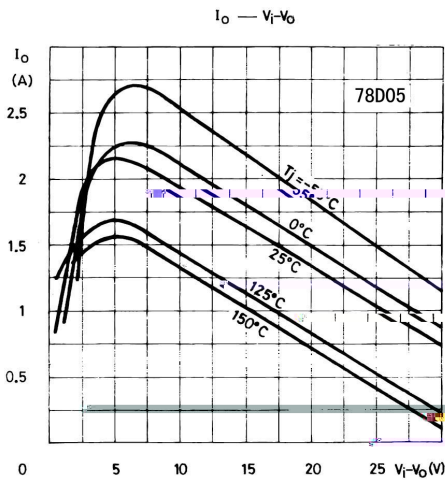
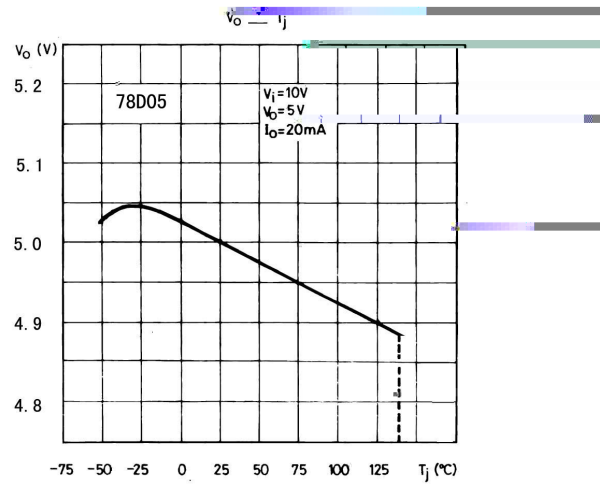
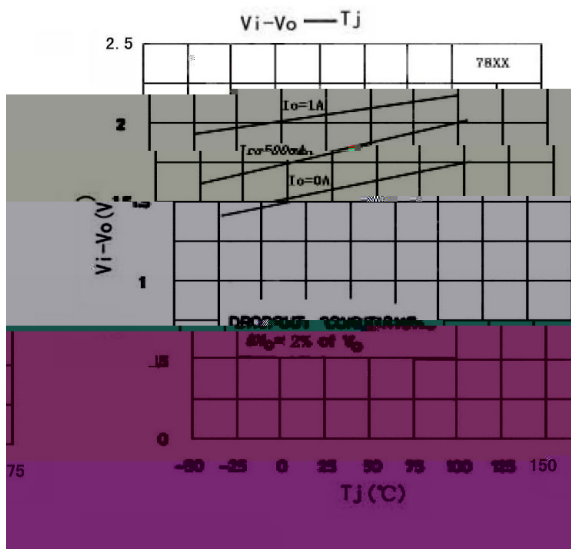
1.5A, AEC-Q100

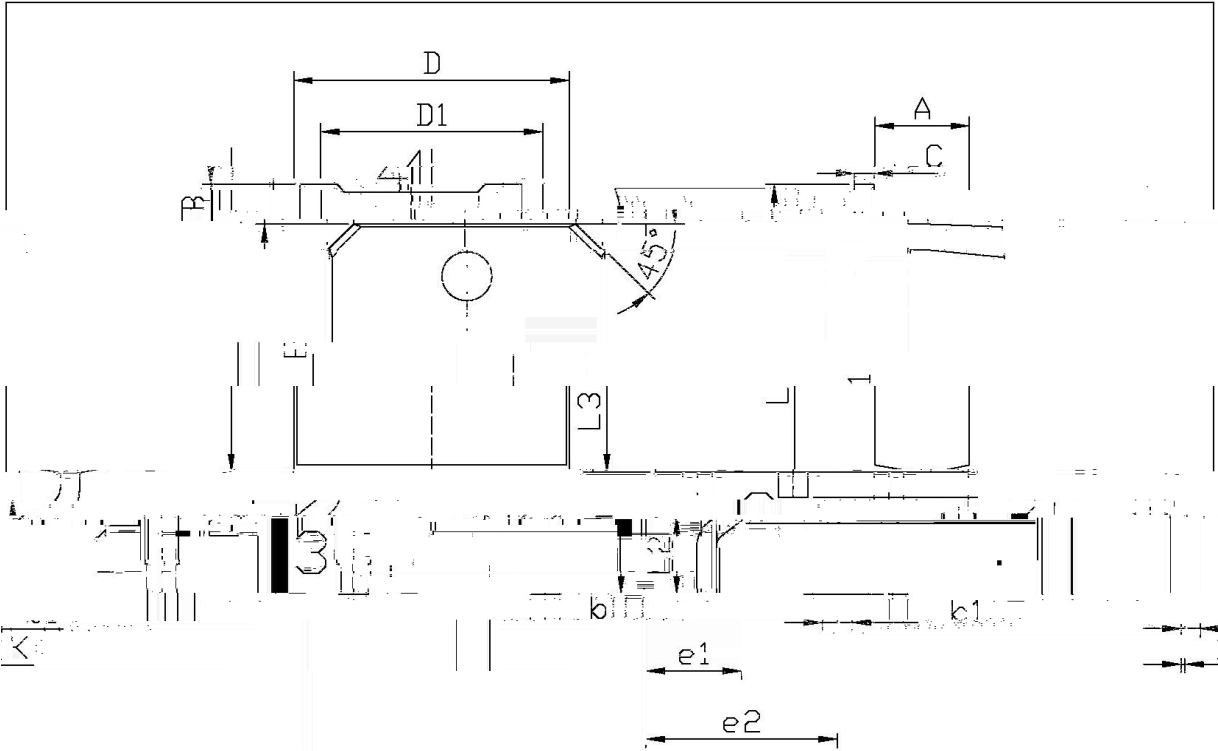
3-Terminal regulators ,output current up to 1.5A, internal thermal overload protection and short-circuit limiting, Qualified to AEC-Q100 Standards

Parameter	Symbol	Rating	Unit
Input voltage	V_i	35	V
Thermal Resistance Junction-Ambient	R_{JA}	105	/W
Thermal Resistance Junction-Case	R_{JC}	10	/W
Operating Junction Temperature Range	T_{OPR}	-40 125	
Storage temperature range	T_{stg}	-65 150	
Junction temperature range	T_J	150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output voltage	V_o	$T_J=25$	4.8	5.0	5.2	V
		$V_i=7V-20V$ $I_o=5mA-1A$ P_o 15W	4.75	5.0	5.25	V
Load Regulation	V_o	$T_J=25$ $I_o=5mA-1.5A$			100	mV
		$T_J=25$ $I_o=250mA-750mA$			50	mV
Line regulation	V_o	$T_J=25$ $V_i=7V-25V$		3.0	100	mV
		$T_J=25$ $V_i=8V-12V$		1.0	50	mV
Quiescent Current	I_q	$T_J=25$			8.0	mA
Quiescent Current Change	I_q	$V_i=7V-25V$			0.8	mA
		$I_o=5mA-1A$			0.5	mA
Output Voltage Drift	V_o/ T	$I_o=5mA$		-1.1		mV/
Output Noise Voltage	eN	B=10Hz-100KHz $T_J=25$			40	V/ V_o
Supply Voltage Rejection	SVR	$V_i=8V-18V$ $f=120Hz$	62			dB
Dropout Voltage	V_d	$I_o=1A$ $T_J=25$		2.0		V
Output Resistance	R_o	$f=1KHz$		17		m
Short Circuit Current	I_{sc}	$V_i=35V$ $T_J=25$		0.75		A

Short Circuit Peak Current I_{scp} $T_{Pea}40172$ 0 0 7.0 =7148.61242.622.06 28.96 ref49.6 186124



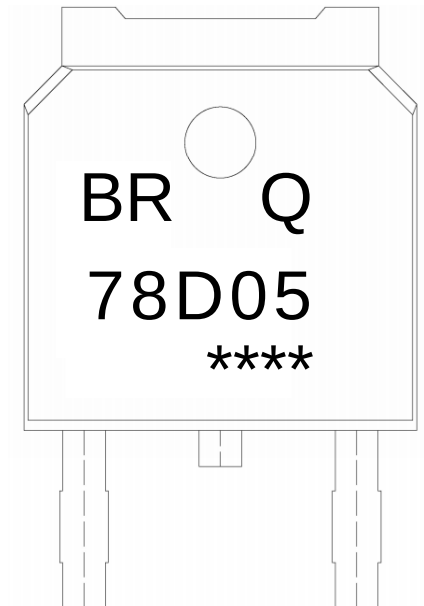


单位：mm

Symbol			Dimensions In Millimeters			Symbol			Dimensions In Millimeters		
5.95			6.25			A			2.20		
2.24			2.32			B			0.95		
10.35			b1			J2			1.70		
0.3			0.60			p			6.45		
K			0.00			D1			5.10		
			0.90						6.75		
			0.10						5.50		

-252

T□-



BR

Q

78D05

Note:

BR: Company Code

Q: Automobile halogen-free product Code

78D05: Product Type

****: Lot No. Code, code change with Lot No

Pb-Free)

e:60~120sec.

tion:5±0.5sec.

.



me:10±1 sec



		Reels/In/Out/Res/In/Box/Out	
		Units/Reel	mm
(unit mm)			
er Box	Outer Box		
Tf-5Tf-5	T88127013	0	T