

Revision History

Rev.	ECN No.	Description of Change	Date	Appvd By
J	24576	Update performance curves	04-22-02	K. Lohrmeyer
K	29836	Add marketing data sheet reference	07-01-05	R. Clark

Document Approval

Originator:	Gilley	Date:	01-26-90
Dftg Check:	Sharp	Date:	11-21-90
Prgm Mngr:		Date:	
Engr Mngr:	P. Townsend	Date:	04-10-02
Mfrg Mngr:	T. McGregor	Date:	04-10-02
Quality:	J. Hunt	Date:	04-10-02

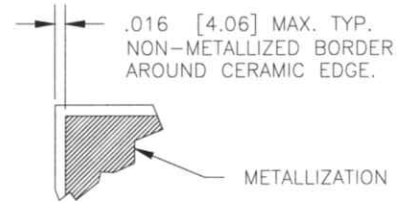
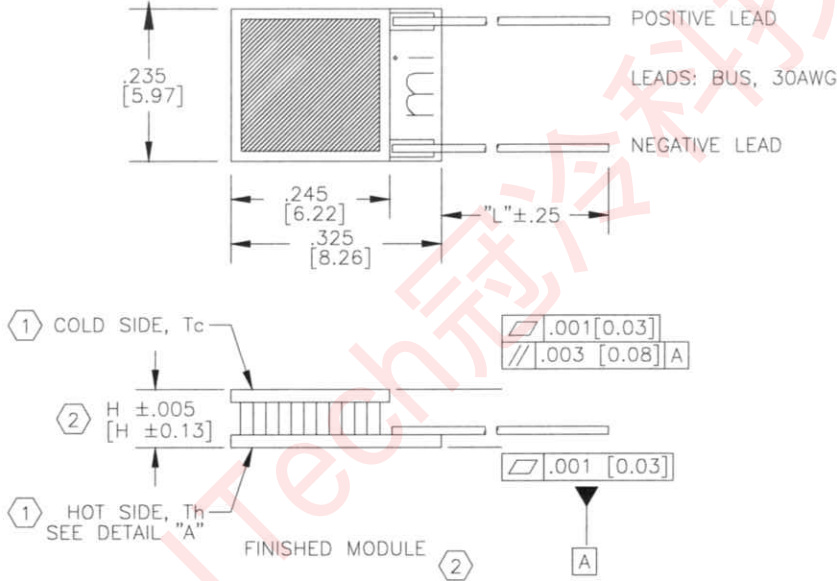
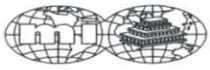
Next Assy

SP5025

Used On

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ORIGINAL



DETAIL "A"
 DETAIL APPLICABLE TO MODULES
 WITH TOP OR BASE EXTERIOR
 METALLIZATION ONLY.

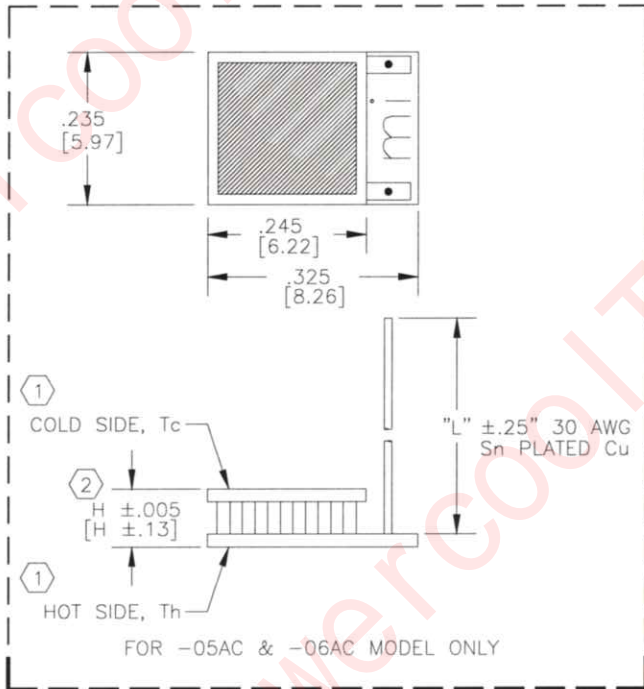


TABLE 1. TEC HEIGHT

PART NUMBER	DIM "H"
-01	.099 [2.52]
-02	.097 [2.46]
-03	.096 [2.44]
-04	.099 [2.52]
-05	.099 [2.52]
-06	.099 [2.52]
-07	.099 [2.52]

TABLE 2. LEADWIRE LENGTH

PART NUMBER	DIM "L"
-01,-02,-03, -05,-06,-07	2.00 [50.8]
-04	1.25 [31.75]

TABLE 3. PRETIN SOLDER WHERE APPLICABLE

PART NUMBER	TOP	BASE	THICKNESS
-01,-04,-05	118°C	183°C	.003 ±.0005 BASE, [.076 ±.013] .004 ±.0005 TOP, [.102 ±.013]
-02	N/A	183°C	.003 ±.0005 BASE, [.076 ±.013] .004 ±.0005 TOP, [.102 ±.013]
-06	183°C	183°C	.0005 [.013] MAX
-07	146°C	183°C	.001 [.025] TO .004 [.102]

UNLESS OTHERWISE SPECIFIED

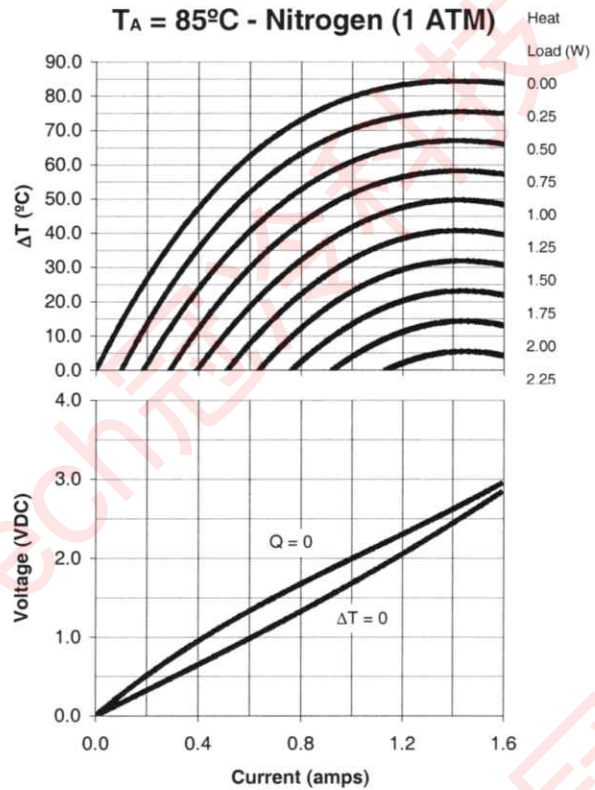
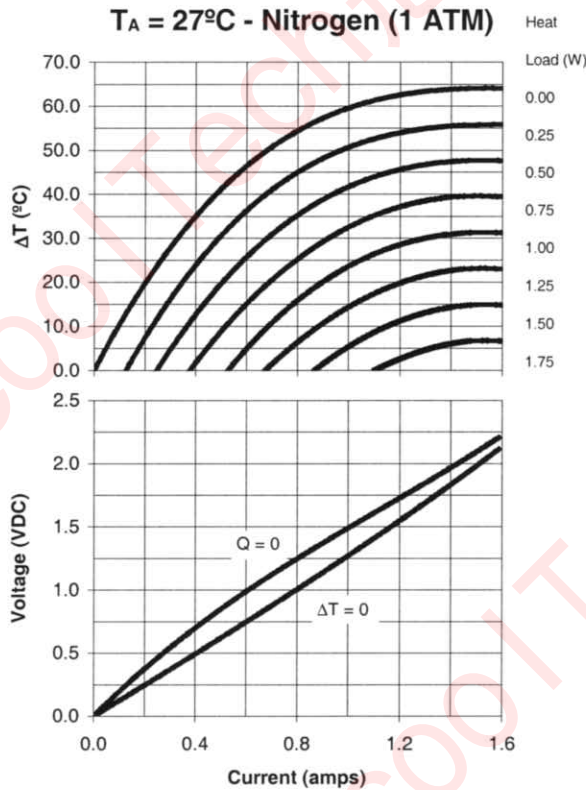
- DIMENSIONS ARE IN INCHES, AND WITHIN [] ARE IN MILLIMETERS.
- GENERAL TOLERANCES:
 DECIMALS .XX = ±.01, .XXX = ±.005, .XXXX = ±.0005,
 ANGLES ± 2° FINISH 125
- DIMENSION LIMITS APPLY BEFORE FINISH PROCESSES
- REMOVE ALL BURRS AND SHARP EDGES .020 MAX
- FILLET RADIUS .018 MAX
- INTERPRET DRAWING PER ANSI Y14.5M

**Reference
 Marketing
 Datasheet
 102-0063**

SP5025-01AC	TEHP Assembly, Metallized Exterior, pretinned with 118°C top/183°C base
SP5025-02AC	TEHP Assembly, Metallized Exterior, pretinned with 183°C base only
SP5025-03AC	TEHP Assembly, No Metallized Exterior
SP5025-04AC	TEHP Assembly, Metallized Exterior, pretinned with 118°C top/ 183°C base; shorter leads
SP5025-05AC	TEHP Assembly, Metallized Exterior, pretinned with 118°C top/183°C base; vertical leads
SP5025-06AC	TEHP Assembly, Metallized Exterior, pretinned with 183°C top and base
SP5025-07AC	TEHP Assembly, Metallized Exterior, pretinned with 146°C top/183°C base



1. Device exterior surfaces: Gold flash over nickel over copper metallization. See Table 3 for external solder and thickness.
2. Dimensions include metallization prior to final tinning when applicable.
3. Maximum operating temperature is 85°C.
4. Maximum process temperature is 220°C.
5. Edges may be scribed and snapped and may display irregularities within the stated tolerances.
6. Ceramic material: Aluminum Oxide.



TYPICAL PERFORMANCE	
Environment : Nitrogen (1 ATM)	
T _A (C) :	27
V _{MAX} (VDC) :	2.04
Δ T _{MAX} (C) :	64.5
I _{MAX} (amps) :	1.46
Q _{MAX} (W) :	1.94
ACR (Ω) :	1.22

TYPICAL PERFORMANCE	
Environment : Nitrogen (1 ATM)	
T _A (C) :	85
V _{MAX} (VDC) :	2.62
Δ T _{MAX} (C) :	85.0
I _{MAX} (amps) :	1.40
Q _{MAX} (W) :	2.40
ACR (Ω) :	-

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SP5025-02AC	TEHP Assembly, Metallized Exterior, pretinned with 183°C base only
SP5025-03AC	TEHP Assembly, No Metallized Exterior
SP5025-04AC	TEHP Assembly, Metallized Exterior, pretinned with 118°C top/ 183°C base; shorter leads
SP5025-05AC	TEHP Assembly, Metallized Exterior, pretinned with 118°C top/183°C base; vertical leads
SP5025-06AC	TEHP Assembly, Metallized Exterior, pretinned with 183°C top and base
SP5025-07AC	TEHP Assembly, Metallized Exterior, pretinned with 146°C top/183°C base